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EDUCATIONAL MOVEMENTS IN ENGLAND. VI.

THE PRESENT EDUCATIONAL SITUATION.

"The question which underlies the efficiency of our nation as a whole—I mean education—in which we are lagging sadly, and with which we shall have peacefully to fight other nations with weapons like the bow and arrow, if we do not progress. We have nothing like a national system, but a great chaos of almost haphazard arrangement."—Lord Rosebery at Chesterfield.

The object of this, my sixth, report upon educational movements in England is to give a general account of the situation created in the educational world by the latest attempt of the Conservative party, now in power, to deal with the problem of reorganising secondary education. So important is this situation that all other matters must stand over to my next communication. An exception must, however, be made in favour of the establishment of a Teachers' Registration Council¹ and the formation of a register of teachers.

The order of the King's Privy Council for the establishment of a Register of Teachers was published at the end of January, 1902. The Register is inclusive and will ultimately make training a *sine qua non*. The list will be alphabetical in two columns. Column A, to which entrance is automatic and without fee, will contain all teachers who hold the Government certificate under the code. Column B will contain teachers holding one or more

¹For a history of the movement leading to the establishment of a Register of Teachers in England, see "National Education," published by Mr. John Murray, Albemarle Street, London, England.

scheduled qualifications, such as a university degree, a teaching diploma etc., who will pay a fee of one guinea with half-a-crown for each subsequent record against their names. A supplementary list contains teachers qualified in special subjects ranging from music to needlework. For the first three years, dating from June, 1902, easy conditions of registration are allowed. Thereafter the qualifications required will be more exacting. Candidates will have to show first a full university degree or its equivalent; secondly, residence and a year's training at a university or recognised training college, or a diploma in theory accompanied by a year's experience as a student teacher; and lastly, a year's experience of teaching as a probationer in a recognised school. It would be difficult to find a better certificate of teaching power than the above triple qualification, if the middle element—the certificate of training—is given with conscience and judgment by the training institution. But it is just here that the difficulty underlying all certificates of capacity—that of discriminating between real power and the conventional simulacrum of it—will make itself felt hereafter no less keenly than it is now.

The framing and keeping of the Register is entrusted to a Council of twelve, half of them nominated by the Crown and half by various educational bodies. At the end of three years the Registration Council, which must report annually to the Board of Education, will be reconstituted by an order of the King's Privy Council.

Weak points in this scheme are found in the fact that the Consultative Committee, the registered teachers themselves, and assistant masters and mistresses, are not directly represented on the Registration Council. The expressions "recognised school" and "elementary teacher" require definition. Again it is not clear why the A column teachers should pay no fee and be registered *en bloc* whether they desire it or not. Kindergarten mistresses will find it very difficult to register.

But there are also strong points. One good effect must be produced even before the end of the three years of grace—a powerful stimulus to the cause of training. It is difficult to see

how Headmasters can any longer refuse to draw the bar of training across the door of the teachers' room. Sooner or later the Board of Education is sure to refuse to recognise any School which is not largely staffed by registered teachers. Already in its recently issued "Regulations for Secondary Day Schools" the Board states that "inclusion of the teacher's name in Column B of the Official Register of Teachers will be accepted by the Board as evidence that a teacher is duly qualified." This will bring a very powerful screw to bear upon the governing body and one that will act automatically and probably without any appreciable friction. It will also act directly upon teachers. Whatever established teachers may do now, the younger generation of teachers will not run the risk of entering the educational market unprovided with a certificate of registration, which ultimately will be unobtainable without a teaching diploma. This provision has, almost at one stroke of the pen, transformed teaching into a learned profession. We shall no longer, as in the recent case of the Merchant Taylors' School, have a raw Senior Classic, almost if not utterly innocent of any teaching experience, appointed to the headmastership of a great public school. A teacher will no longer be defined as "a man licensed by the ordinary," "a man with an M. A. degree," "a man sanctioned by apostolical succession and the laying on of hands," or "a man who in a free country teaches because he chooses to," but simply and comprehensively as "a man who can teach." The achievement of this definition, even by implication, as a description hall-marked by the government of the country is so great a triumph for English education and one so pregnant with the most far-reaching possibilities of regeneration and re-inspiration that the minor defects of the registration order in council sink into insignificance beside this great boon so long sought after and so hardly won.

I turn now to the Education Bill. First I will name the parties interested in the scope of the new bill and responsible for the pressure which stimulated a Conservative government to attempt reform. These fall roughly into educational institutions and educational governing bodies. Among the former are, on

the one hand, public secondary schools endowed by pious founders or living either partially or wholly upon fees and, on the other hand, the private and proprietary schools owned by individuals or companies. In a third camp are to be found the public primary schools, supported either by the public rates or by voluntary contributions. Among governing bodies are the governors of endowed schools, the school boards which control the rate-aided primary schools, the managers of voluntary primary schools and private and proprietary owners. There are also a number of powerful associations representing the interests of head and assistant teachers of both sexes in public and private schools. Lastly there are certain public purse-bearers, such as the technical education boards of town and county councils, and various trusts which make grants to educational institutions. With the conflicting aims and motives of these various parties I will deal later. Here I wish to draw attention merely to the fact that, traversing all their claims, there run the non-educational political considerations which sway the actions of the Government and cannot be ignored in any attempt to appraise the relative disinterestedness of the various parties named above.

Before we go further it will be well to consider the situation which called forth the Bill. The origin of the 1902 Bill is to be found in the situation created by the abortive Bill No. 1 and the Bill No. 2 which was substituted for it in 1901. It is in effect, however, an attempt to complete the legislation which created the new Board of Education and the Consultative Committee in 1900. That legislation, having established a central governing body, i. e. the Board of Education, with a permanent advisory body to help it, i. e. the Consultative Committee, left uncreated the Local Authority which should in each additional district act as the executive of the central Board of Education. The Bill of 1902 attempts to supply this omission. The genesis of the whole movement for reform is well set forth in the Duke of Devonshire's speech at the Coronation Dinner of the County Councils' Association. He said in effect that the inevitable consequences of the Acts of 1870 and 1889 had not been foreseen

when they were placed on the statute book. Neither Mr. Gladstone nor Lord Salisbury foresaw that the development of primary education would call for the reorganisation of secondary education, nor that the Technical Instruction authorities would unofficially attempt to answer the call, with collision of administration and resultant overlapping. When this occurred, it was open to the Government to substitute for the warring influences a single central and single local authority, to distinguish sharply between the primary and secondary grades, or to let the combatants fight the question out at the cost of the ratepayers until the fittest survived. The Government chose the first and most difficult, but also the most statesmanlike, solution.

It would be tedious to quote the Bill *in extenso*. The following *précis* appeared in the *London Journal of Education* for April 1902:

PRÉCIS OF THE EDUCATION BILL.

The Local Education Authority

is the Council of every county and county borough, except that, as respects elementary education, the Council of a borough with a population over ten thousand, or of an urban district with a population over twenty thousand, is the Local Education Authority.

Education Committees.

Any Council, except as regards the raising of a rate, shall act through an Education Committee or Committees constituted in accordance with a scheme made by the Council and approved by the Board of Education.

The Scheme

shall provide (1) for the selection and appointment by the Council of at least a majority of the Committee; (2) for the appointment by the Council, on the nomination, where it appears desirable, of other bodies, of persons of experience in education, and of persons acquainted with the needs of the various kinds of schools in the area for which the Council acts.

There may be separate Committees for any areas within a county or Joint Committees for areas formed by a combination of counties, boroughs, or urban districts.

Wales.

Wales and Monmouthshire are excepted from the Act, though at liberty to adopt it.

Finance.

The expenses of a Council under this Act shall, so far as not otherwise provided for, be paid, in the case of the Council of a county, out of the county

fund; and in the case of the Council of a borough, out of the borough fund or rate; and in the case of the Council of an urban district, as expenses incurred for the general purposes of the Public Health Acts. But the expenses of any secondary school or college may, at the discretion of the Council, be charged on any parish or parishes which the school or college serves.

A borough or urban district which takes over elementary education may not be aided by a county rate.

The annual Parliamentary grant in respect of any school maintained by a Local Education Authority shall be paid to that Authority and applied in aid of the expenses incurred by them under this part of the Act.

ELEMENTARY EDUCATION.

Resolution of Adoption.

Any Council, as defined in Part I., may pass a resolution of adoption at a meeting of which one calendar month's notice must have been given. This resolution shall come into operation at such time as the Board of Education shall fix, but not sooner than one month after the publication of the resolution. If the resolution has been rejected, it may not be brought forward again before three years has elapsed.

Powers and Duties of Local Authority.

The Local Education Authority shall throughout their area have the powers and duties of a School Board and School Attendance Committee under the Elementary Education Acts, 1870 to 1900, and the control of all secular instruction in public elementary schools, whether provided by them or not, and School Boards and School Attendance Committees shall be abolished in that area.

Management of Schools.

In the case of schools provided by the Local Education Authority, that Authority appoints the managers. In the case of schools not so provided, the managers are the same as under the Elementary Education Acts, 1870-1902.

Maintenance of Schools.

The Local Education Authority shall maintain and keep efficient all schools within their area, with the following provisos as regards schools not provided by them:—(a) The managers of the school shall carry out any directions of the Local Education Authority as to the secular instruction to be given in the school. (b) The Local Education Authority shall have power to inspect the school, and the accounts of the managers shall be subject to audit by that Authority. (c) The consent of the Local Education Authority shall be required to the appointment of teachers, but that consent shall not be withheld except on educational grounds. (d) The managers of the school shall, out of the funds provided by them, keep the school house in good repair, and make such alterations and improvements in the buildings as may

be reasonably required by the Local Education Authority. (e) The Local Education Authority shall have the right of appointing such persons as they think fit to be additional managers, so that the number of the persons so appointed, if more than one, does not exceed one-third of the whole number of managers.

Provision of New Schools.

When the Local Education Authority or any other persons propose to provide a new school, the managers of any existing school, or ten of the rate-payers, or the Local Authority (if they are not the providers), may appeal to the Board of Education, and the Board of Education shall determine whether the school is necessary or not, but a school actually in existence shall not be considered unnecessary in which the number of scholars in average attendance is not less than thirty.

Power to Enforce Duties.

If the Local Education Authority fail to fulfil any of their duties, the Board of Education may make any order they think proper, and enforce the order by mandamus.

SECONDARY EDUCATION.

The Local Education Authority may supply or aid the supply of education other than elementary, and for that purpose may apply the residue under Section 1 of the Local Taxation (Customs and Excise) Act, 1890, including any balance thereof which may remain unexpended at the end of a financial year, and may spend such further sums as they think fit: Provided, that the amount raised by the Authority for the purpose in any year out of rates under this Act shall not exceed the amount which would be produced by a rate of twopence in the pound, or such higher rate as the Local Government Board may fix by Provisional Order made as respects any particular county or county borough on the application of the Council of that county or county borough.

Smaller boroughs and urban districts shall have concurrent powers with the County Council, provided that the amount spent by them on higher education does not exceed a penny rate.

Religious Instruction.

No denominational religious instruction shall be required in any rate-aided school or college, and for day scholars there shall be a conscience clause.

Extent and Commencement of Act.

This Act shall not extend to Scotland, Ireland, or, as regards elementary education, to London. It shall come into operation on the appointed day, that is, except as expressly provided, on March 26, 1903, or on such other day within a twelvemonth as the Board of Education may enact. As regards elementary education, the appointed day is the day on which the resolution of adoption comes into force.

It will be interesting now to consider the reception of the Bill by various parties and individuals, whose opinions will throw up the features of the Bill and reflect the multitude of personal and political biases which this attempt at reform has had to face.

First, then, the Press. The leading newspapers concurred in approving the Bill, but united in condemning the local option clause. The *Manchester Guardian*, one of the best of the English provincial papers, described it as "a genuine effort to deal in a comprehensive manner with primary and secondary education." On the other hand the *Pall Mall Gazette*, a Conservative evening paper, considers that the Bill "will set up a guerilla warfare of a singularly unpleasant kind through the length and breadth of the country." The *Westminster Gazette*, a Liberal evening paper, resents the disbursement of public money for the support of denominational schools and the attack on school boards. Lastly the *Daily Chronicle*, which may be taken to voice the wishes both of the Radical party and the Free Churches, describes the Bill as "very faltering and tentative in its movements towards co-ordination and very revolutionary in its attitude to the voluntary schools."

The opinions of individual leaders of educational thought are no less interesting and influential. The Bishop of Salford, a Catholic, and Dean Lynch, an Anglican, approve the Bill. Sir John Hibbert approves it as a settlement of the growing friction between board and voluntary schools. The Bishop of Chester believes that it will draw the most venomous sting out of the competition between denominational and non-denominational schools. The Rev. Hugh Price Hughes and Dr. Parker oppose the Bill as Nonconformists. The Right Honourable James Bryce says it is not an Education Bill, but "simply a Voluntary Schools' Endowment Bill." Writing in the *Nineteenth Century*, he criticises the Bill for not making provision for filling gaps in, and raising the quality of, existing education; for not dealing with training and abolishing the pupil teacher system; for alienating popular sympathy and encouraging sectarianism; and for applying to the trouble of rural schools and the attendance

age a remedy which is both costly and uncertain. Sir Joshua Fitch says the dominant purpose of the Bill is to give the denominational system a "renewed chance of permanence." The Bishop of Rochester regrets that it leaves the larger part of our urban areas in the hands of undenominationism and traverses trust deeds and traditions. The Right Honourable A. H. D. Acland considers the Bill "wholly inadequate." Lord Rosebery approves the municipal principle on which it is based. Archdeacon Sandford considers that the Bill neglects secondary to the advantage of primary education and makes no provision for subordinating local to central inspection, while the areas for which local authorities may be chosen are too small.

Of the various bodies affected, the School Boards naturally object entirely to a Bill which makes for their abolition. The Established Church of England is just as naturally pleased with a Bill that will rescue its schools from impending ruin. The Free Church party denounce as impossible and unworkable several features of the Bill which are said to be found in full working order among our better educated industrial rivals on the continent. They describe the Bill as a scheme for endowing denominational schools, and refuse to pay eleven pence in the pound in the shape partly of rates and partly of taxes in exchange for having denominational schools controlled by the local authority, though formerly they paid ten pence in taxes and had no control. But the incidence of rates is more directly felt and therefore more easily understood than that of taxes, and the Free Churches always regarded the absence of control as a grievance against the Established Church schools. The attitude of the extreme agricultural party is, naturally, based on the principle "more manure, less learning," though all over the country, outside the county boroughs (i. e. boroughs large enough to rank electorally as counties), the agriculturists' rate for elementary education will probably not exceed two pence halfpenny in the pound.

Lastly we have the profession. The National Union of Teachers, which consists almost entirely of primary teachers, but is by far the largest association of teachers in the country,

almost unanimously approved the Bill at their Bristol conference, excepting only the clause on local option, which has since been abandoned by the Government. The Teachers' Guild, the Association of Headmasters, and the Association of Assistant Masters regard the Bill with favour. The College of Preceptors, the oldest association of teachers in private schools, has not yet made any formal pronouncement on the subject.

As for the faults and virtues of the Bill, some have already been cited in my account of its reception by public men and parties. To give all would be tedious, but a few more may be noticed here. The optional clause in respect of primary education was fatal and naturally did not survive the attack in Parliament. The absence of provision for training has been already noticed, and a clause should be introduced empowering county councils to establish training colleges. That the local authority should have a veto on the appointment, but not on the dismissal, of teachers is absurd. The permission to establish new denominational schools will require most jealous watching, if public money is not to be wasted. The clause providing that "the consent of the local authority shall be required to the appointment of teachers" should be extended to cover dismissal also. The constitution of the educational committees is too indefinite. A fixed number, say one-third, of the members should be chosen from the members of the corresponding county council. The committee through which the council acts for both primary and secondary education should be definitely the education committee and no other. Educational bodies, like school boards, should have a recognised position independently of the will and pleasure of the council. Suitable provision should be made for pupil teachers belonging to the Free Church. Certain difficulties are apparently not provided for, e. g. the possibility of a deadlock between a county council and its education committee.

If we now turn the shield, it appears that "the Bill concedes in principle nearly all that the Teachers' Guild," the one educational association in England which represents all grades of teachers from the highest to the lowest, "has contended for." It gives one local authority for all education outside the univer-

sities, acting through statutory committees on which educational experts will have a voice and vote. Further this local authority will have, not perhaps an adequate, but at any rate a substantial share in the management of the voluntary schools established and owned by denominational bodies. Evening schools will be dropped and not replaced. The "whisky money" is no longer ear-marked for technical education and will therefore be available for both primary and secondary education. The arrangement with regard to voluntary schools seems to many a fair compromise which will reduce the "intolerable strain." The educational supply will no longer vary with the resources, but with the needs, of a district. The germ of popular control permeates the Bill. Means are now available to provide adequate funds for secondary education in all its branches, and a firm "foundation is laid on which further legislation can be built." One item "of supreme value" is the elaborate provision made for the combination into one committee of the representatives of a county and its boroughs and urban districts, which makes strongly for carrying out the main intention of the Bill, i. e. co-ordination of all grades of education over the whole of a given area. I will close this summary of favourable points in the Bill, which I have culled from various opinions, by two quotations. Mr. Hance, of Liverpool, speaking at a meeting of the School Board Clerks' Association, said "The Bill will set up immediately for five-sixths of the population bodies capable of dealing with all forms of education, and will extend to every child such advantages of education as can be secured by public expenditure directed to a greater or less extent by public control."¹ Dr. Oliver Lodge, Principal of the University of Birmingham, declares that "the Bill is a strenuous and conscientious effort to legislate in the right direction, a statesmanlike attempt to grapple with the numerous difficulties that let or hinder a national and democratic system of education."²

I come now to the question "Why is the Bill what it is?" The answer is to be sought in the motives of the various persons and parties whom the Government—a Conservative Government

¹ *London Journal of Education*, July 1902, page 435.

² *Ibid.*

compelled by the cruel irony of fate to grapple with its immemorial *bête noire*, reform—has endeavored *more politico* to conciliate. These opposing powers, whose whims and wishes Mr. Arthur Balfour has had to reduce to a common denominator, fall, roughly speaking, into four groups—the School Boards; the politicians; the Established and Roman Catholic churches, working in this matter together; the Free Churches and their propagandist association, the Liberation Society.

The School Boards have enjoyed the right of spending funded rates which they do not themselves raise and naturally resent any interference with the privileges of the irresponsibility thus created—privileges which have narrowed their view of education and driven them along grooves of extravagance and faddism. They would have the Government stand aside and let them fight the Church party at the expense of the public rates, killing the voluntary schools by lavishing money on their own. The School Boards in the provinces the Government has defied, but the power of the London School Board is seen in the present exemption of London from the operation of the Bill. Mr. Balfour, however, threw out in his speech at Fulham a hint that the London School Board would be dealt with next year, which, being interpreted, means when the present ferment has subsided and he can safely bring the leverage of the *fait accompli* in the provinces to bear upon the problem of the metropolis.

The pressure of the politician is seen in the readiness of the Church party to concede the right of denominational teaching to all creeds in exchange for rate aid to the Church schools. It is further seen in the fact that the clamour of professional associations produced little effect upon the Government. Education *qua* education was of no interest to it. But a large Bill was speedily forthcoming when the wrath of a powerful political "interest" was aroused, and the Church papers began to accuse the Government of having "entirely forfeited its claim to support," of "playing fast and loose with the question," and of "not fulfilling its whole promise." The present Bill is due to the parlous state of the voluntary (i. e. Church) primary schools.

The power of the Church party is seen in the retention of

the dual primary school system, "with all its unfairness to teachers, inequalities in salaries, and squabbles of sectarian and unsectarian fanatics." It is seen again in that the Bill makes no attempt to remedy the crying injustice that Free Churchmen are, solely "on account of their religious opinions," debarred from entering 36 out of the 44 training colleges, which are chiefly maintained by public money. The Bill leaves a serious grievance of the Free Churchmen, full representation on the managing boards, unremedied.

The influence of the Free Church party is seen in the concession of at least partial control of the Church schools by the local authority; but, as already explained, with this they are not content. They desire an absolute equalisation of rate aid and state control as between the schools of both churches. The case for the Free Churches is so ably put by a leader writer in the *Daily Chronicle* for September 24, that I cannot refrain from making two long quotations:

The Roman Catholics applaud the Bill because it recognises their principle of maintaining, at the expense of the State, a "Catholic atmosphere" in their schools. The Congregationalists denounce the Bill because it traverses principles of civil and religious liberty which they have ever held dear. The Bill perpetuates religious tests in the case of a large proportion of the teaching profession. It does nothing effective to remedy the grievance of Nonconformist parents who have to send their children to Anglican schools, manned under this system of tests so as to secure an Anglican atmosphere. The Bill, while perpetuating the worst features of the present state of things, introduces a new and reactionary principle into our political system. It proposes to levy a rate without giving to the rate payers any effective control or management. It quarters Church Schools entirely upon the public purse, while leaving the Church managers in supreme control. In all these ways the Education Bill cuts deep down to issues which men rightly deem to be essential. The enthusiasm of the Roman Catholic Bishops for the Bill is as intelligible and legitimate as is the anger of the Free Churches against it. . . . It is sometimes said that after all the amount of difference made by the Bill, in relation to these issues, is not very large. Church schools are already for the most part supported by public funds; why, it is asked, should it be a matter of conscience to refuse to pay a rate, when no such scruples have been manifested about the payment of taxes? The answer is obvious and manifold. In the first place, this is a case of "the last straw"; secondly, it is a case of a compromise being disturbed; and thirdly, a new principle is intro-

duced. Nonconformists have chafed under the many grievances involved in the existing system; the fact that they have acquiesced hitherto does not logically require them to acquiesce when the subvention to denominational schools is to be increased, and when the levy of it is made more direct. Again, the present Board School system was the result of a compromise. No demand for its reversal has come from the Nonconformists, or from any body of the laity. It is being upset at the bidding of the Anglican clergy and the Roman Catholic priests. Mr. Balfour talks of concessions made in the Bill to the Nonconformists; they are of a very unsubstantial character, and in no way meet the essence of their case, and they are far more than counter-balanced by the rest of the Bill. An entirely new situation is thus created, and the Nonconformists are free to take their stand *de novo* on their own fundamental principles. The levying of a rate to pay for the maintenance of denominational schools involves also a new issue. To levy a rate without giving equivalent control is a violation of an established principle of free government.

With the intention of fighting this matter to the death, the Free Churches are now busily organizing an autumn campaign against the Government and its education bill, which may end in the destruction of both the bill and its makers, for the cry of religious equality, which easily covers ulterior motives, is a powerful one, and has before now proved fatal to Conservative governments in England.

So far I have dealt with the Bill as originally published; but, since then, it has suffered considerable alteration in the House of Commons. The existing Treasury government grant is to be doubled, and will now stand at about 7s. 6d. per child, 4s. being paid to the school and the remainder "apportioned according to the poverty or wealth of the area as shown by the produce of a penny rate." In this grant of 7s. 6d. are included the existing special aid grant to voluntary schools, and the grant to poor school board areas. The permission to the local authority to consider the needs of education other than elementary, is now converted into an order by the substitution of "shall" for "may." Provision for training is now specifically mentioned, and the spending of the "whisky money" upon education has been made compulsory. By another amendment the number of managers of schools is fixed and representation is given to parents and parish councils. In county boroughs the rate for secondary edu-

cation is now unlimited, and a similar rate may be levied in counties by simple consent of the Local Government Board. The Cowper-Temple conscience clause, which has contributed so largely to the smooth working of the elementary education acts, has been introduced into the secondary education clauses in spite of the opposition of the extreme clerical party. The first eight sections, which "contain the main principles that offend, or appear to offend, the opposition in parliament," having passed, the House of Commons adjourned for the summer vacation, and the consideration of the Bill will be resumed in an Autumn session.

I come lastly to the future. Assuming that the Bill passes, it cannot be placed on the statute book much before Christmas. The County Councils cannot begin to form the local authorities before January, 1903, which leaves only three months to prepare for taking over financial duties at the end of the financial year on March 31st, 1903. In this period of preparation each council will have to settle whether it will assume the ideal attitude and establish one sole authority for all educational purposes in the county or avail itself of the permissive nature of the Bill in this respect and establish separate authorities for primary and secondary education. The great object of the Bill will probably be defeated if all grades of education are not put under the control of the same committee—at any rate in counties. Whether the council may or must delegate to such authorities all powers except raising a rate or borrowing money is not made clear in the Bill as far as it has been discussed. As regards finance most, if not all, councils are probably in a position to act forthwith. But before all these things can be, we have to face the possibility of the Bill being thrown out. For reasons already explained, the Free Churches will have none of it. They will not follow the professional associations in the cry that half a loaf is better than no bread and that the concession of substantial state control over the schools of the Established Church is worth the proposed increase in the rates. The prime minister's hint of a supplementary Bill next year to deal with London on the same lines has arrayed the vast influence of the London School Board against the Government. The Liberal party, headless and inchoate and unprovided with any alternative

scheme though it is, seems determined to go to the country on an education bill, although the electorate is mostly incapable of distinguishing between education *qua* education and the sectarian propagandism which masquerades in its robes. The urban population, moreover, has outlived its prejudice against school boards and is now ready to oppose their destruction with the same blind partisanship with which it opposed their establishment. Thus the Bill has provided all the traditional opponents of Conservatism with a rallying cry which may, at least during the brief ferment of the polls, stand them in place of a leader. On the other hand, once the Conservative government awakes to the union of its hereditary enemies, it may, as often before, consider the abandonment of a reluctantly attempted reform as far preferable to the risks of extinction at the next general election. Then the Bill will go the way of its recent predecessors.

This would, I think, be on the whole a matter for regret. For this Bill, halting and imperfect as it is, does after all give us much that is valuable. First under this head must be cited the main principle of the Bill, which has so far survived all attacks, i. e. "that all schools of the people must be brought up to and maintained at a certain standard of efficiency; that, to secure this end, existing denominational schools must be utilised and supported at the public cost, their secular teaching being subject to public control, while as regards their religious teaching they retain their independence." As already explained, the Bill gives us, at least permissively, one local authority, acting through statutory committees leavened by educational experts, and a substantial public control of denominational schools. This is not all advanced educationists wanted, but it is much. Nevertheless the fact remains that the denominational schools will continue to be in the future what they have been in the past — buttresses of denominationism rather than agents of education. This was frankly put by the Roman Catholic bishop of Clifton at the conference of the Catholic Truth Society at Newport, when he said "that Catholics did not attach so much importance in effect to the teaching of arithmetic or geography their primary duty was to train the children to become good Christians and good Catholics." The "true inwardness" of the Bill is well

stated by the leader writer in the *Daily Chronicle* already quoted: "The governing idea of the Bill is not educational; the impulse behind it is not derived from any zeal for education; the main issues which it raises are not educational, but political and religious. It is this aspect of the matter, and not any disinterested concern for education, which causes the Bill to excite so much interest." Thus nothing really satisfactory and final will be done until the country is convinced that priests and parsons, *qua* priests and parsons, have nothing whatever to do with education in its secular aspects, which are the concern of the state, and further that the religious aspects of education are better relegated to the sphere of the home and the agency of the parent guided by the priest within that sphere.

Thus I have set forth what is perhaps the most remarkable situation in the recent history of English educational developments and cast upon it the light of those many and diverse opinions, social and individual, which at one time stimulate reform, at another modify all attempts to carry it into effect, and eventually add to history some small portion of solid gain. Looking upon the situation with the impartial eye of philosophy, one cannot fail to be struck with the lack of greatness in conception, courage in execution, and resolution in achievement which distinguish the creative efforts of the English nation. Here was an opportunity to conceive a truly great educational reorganisation, here would a little true courage have broken down factious opposition, and here would a modicum of resolution have clung to essential principles till they had been recorded on the statute book. But what have we really obtained?—a truly English product of great ideas "cabined, cribbed, confined" by petty party considerations and disfigured by the famous British brand of political expediency. Yet, if the Bill passes, no one can deny that another addition will have been made to the sum of educational excellence, and for that, while the idealist sighs, the practical Englishman will "rejoice and be glad."

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AN EXPERIMENT IN TEACHING ENGLISH.

SEVERAL years ago, there fell to the lot of the writer an opportunity to teach English in the high school of a country town. The town was a pretty, amiable town: the school, too, was cheerful and amiable, though shamefully run down from five years of change, misrule, and no rule. Set in the heart of a coal field, our population was a mixed one, and we sometimes had in our schoolroom representatives of five or six nationalities, many foreign-born, though under seventeen years of age. The public schools of the borough served a population of about five thousand, but Polish, Italian, Slav, and Hungarian families rarely left their children in school beyond the upper grammar grades. We hardly lacked variety, however, as things stood, and a small admixture of the old Yankee stock, children of well-to-do families of transplanted New Englanders, with six generations of books and brains behind them, furnished another contrast.

Such was our material; moreover, it was raw material. To such a degree had custom stated the infinite variety of grammar school routine that our thirteen-year-olds came up to us from the eighth grade veritable little Bourbons. They had learned nothing and they had forgotten nothing since the days of the fifth grade, and, Bourbon-like, they didn't propose to begin. They would not read aloud intelligibly, far less intelligently, from anything but the *Readers*, which they had by heart. Their spelling knew no law; anarchy prevailed among the parts of speech; the commonest rules of grammar belonged only between the brown covers of a text-book, and never, by any chance, were allowed to come out to hinder people in the affairs of practical life. In three successive years, three grammar-school teachers had exacted tribute to the amount of two "compositions" a year, on such topics as "Chalk," "Rivers," "A Rainy Day," "Evangeline," "Clouds," "Farming" and "Wild Birds." Very naturally, no one of the sixty-five little Bourbons had ever guessed that written work aimed, first and foremost, to train the mind to

think clearly and straight to the point, whether for speech or writing. A composition was a thing one wrote when the teacher required it; it was copied in a fair hand with a fine pen on glazed paper, had an inch-and-a-half margin at the left, the title written as handsomely as possible at the top of the page; had two or three paragraphs, each beginning with a capital letter beautifully flourished, each indented carefully, each owing its very existence to a desire on the penman's part to "make the page look pretty." Sometimes the whole production was a single sentence linked with fifteen or eighteen and's and but's; the paragraphs with their spacing and initial capitals by no means breaking the peaceful continuity of the whole, merely pleasing the artistic sense of the reader by beauty of line and mass, and tailing off modestly with a non-committal comma after the last word, to be succeeded by another installment of capitals and conjunctions on the next line.

In mental training, the writers of these precious "compositions" were again pitifully lacking, and conspicuously in literary matters. In common with the other fifty pupils of the high school, who had come through the same mill in their day, the newly promoted class devoutly believed Longfellow the only very great poet of the English race, Holmes, Lowell, Whittier and Bryant receiving a mild sort of honorable mention. They had read, in the straight (and narrow) path of school duty, *Evangeline*, *Hiawatha*, *The Courtship of Miles Standish*, *The Rainy Day*, *The Psalm of Life*, *Snowbound*, *Maud Muller*, *Thanatopsis*, with short extracts from the prose of Webster and Emerson. They had read enough, they thought; they resisted determinedly the suggestion that they read something more. In moments of heart to heart confidences, one learned from the more outspoken members that "the class just can't bear any more poetry; O, Miss ———, it's so dull!" And prose was almost as bad, so far as "school selections" went; though in private the girls read Edna Lyall and the classics of Bertha M. Clay, while the boys carried Henty books under their arms to hide the bulging rolls of *Diamond Dick*, *Jesse James*, *Luck and Pluck*, *Work and Win*, *Old Sleuth*, and all the tribe of penny-dreadfuls, that distended their

coat fronts. In a town that had no public library and no book store, where people live well and dress well and are content to own no books, was it not a deplorable situation?

The present writer was fresh from college, used to living among books, and full of that certain zealous energy which belongs to one trying the paces of a hobby or experimenting to testing a long cherished theory. For I had a theory that narrative was the easiest and simplest method of teaching children over seven years of age, as the kindergarten appeal to the body through the mind is called the easiest under that age: that narrative is the natural habit of thought and speech of most children and young persons, and that narrative is, therefore, the most purely natural of all literary forms; and that, lastly, the literary education of young minds is best begun and carried along by means of narrative until the critical sense and constructive instinct are unconsciously developed. Here was the best of opportunity to try my theory. I was in sole charge of both the history and the English, to change, arrange, and rearrange, buy books and discard books at discretion. The sixty-five were for the most part shrewd, sensible, healthy children, ready-witted and good tempered. So indeed were most of their elders of the three higher classes, but for this report of my experiment I purpose to confine myself to the progress of the youngest grade.

A thorough course in English grammar (five appointments a week), with a good text-book, was shamefully necessary; that was routine work, drill, drill, and drill again, and nine months was none too long a term for the work. One appointment a week was dedicated to composition work, but under one disguise or another work in written composition was exacted daily. The formal study of rhetoric and English literature was postponed indefinitely, and we began instead a nondescript course of reading, writing, class discussion, and criticism, which stood on the school program as "Classics," a safe name that bound the faculty to nothing in particular.

With the sixty-five divided into two sections and provided with a book apiece, we began to read *The Lady of the Lake*. The strong narrative interest of the book was a qualification of first

importance; it was as different as possible from *Evangeline* or *Hiawatha*, in the second place; thirdly, I wanted to work the class hard for a month or two in a fresh line, and the necessary historical references afforded just such a burden as their young shoulders needed; lastly, the poetry-worn ears and brains were to discover for themselves, classify, and memorize the simpler elements of versification, a quest nowhere more easily satisfied than in the varied verse forms and stanzas of this book. For the first few days it was up-hill work. Omitting the Spenserian stanzas of the introduction, we began at once the story of the hunt, reading aloud in class without previous preparation; and not more than three out of thirty-three could read six lines without outrageous mistakes in pronunciation, while the simple rhythm of the verse was lost altogether. Even the fluent readers, who could pronounce the unusual words, had little idea of the sense of the text; and in the general darkness, to order a word by word translation with dictionaries would have been to add despair to discouragement. With the air of making the best of a bad matter, we read doggedly on, a few lines at a time, and cleared up dark passages as we could, for the first few days. But presently pocket-dictionaries began to appear all unbidden; and as the unlucky victim of the moment stumbled on toward a formidable, meaningless, unpronounceable word some lines ahead, one heard the dictionary leaves flutter, and at the crisis eight or ten enterprising young persons could tell him how to pronounce it. This was the beginning, and from this stage the lump leavened itself most satisfactorily. To know the meaning of outlandish words became a matter of distinction; to pronounce anything and everything correctly in reading was no more than proper pride.

Presently, too, the interest of the story, the direct and simple appeal to imagination, gained the mastery over prejudice and indolence alike. As soon as this had happened, it became safe to comment upon particular bits of description for their charm, their vividness; to question how this or that bit of workmanship reacted upon the reader's mind, and what the secret was that made unlike matters interesting by the simple device of group-

ing them closely together. The discovery that iambic tetrameter and trochaic tetrameter differed in sound because of a very real structural difference left the class fairly swollen with pride, so that the graphic representation of these verses was mere play, and the rather difficult terminology almost "remembered itself." The true inwardness and reasonableness of rhyme was a puzzle that lasted us through weeks, and the difference between correct verse and good poetry remained a matter of dispute to the very end. The school library of reference books was ransacked for information about Scottish history in general and the Douglas family in particular, and Scott's own notes upon customs and folk-lore aroused a natural curiosity about his personality and the details of his life. After about eight weeks of this kind of study and of almost daily practice in putting some ideas on paper, the written work of the class began to improve. Conjunctions diminished, and periods and semi-colons crept in. Here and there in the class individuals formed a habit of coming to the point in a few words, and of writing about one thing at a time—a tremendous step in advance. New words slipped from *The Lady of the Lake* into private keeping, and great was the innocent pride of the borrowers in displaying them here and there. And all of these desirable things came about because the children were teaching themselves unconsciously while engrossed in the story. So far, the theory was working well.

Then, at the end of twelve weeks, came the term examination. I laughed over the papers, and scowled, and laughed again, but I read them with an interest that I never thought to feel in sixty papers on the same subject. Nearly every page was stated clearly enough to make the writer's thought plain, which was in itself a substantial good; but what an expanse of intelligent ignorance stood revealed! In the same paper with a piece of discerning criticism of the plot structure and a brief character sketch which showed real grasp and penetration, occurred these annotations: "A Bard is an article of Highland dress, or a weapon for defense. A Druid is a string of colored lights that they used to hang out on the hill-tops when one of their chiefs or the head of a Highland family died, to let the people

know." Another, a painstaking, conscientious student, is the authority for the following definitions: "Poetry," said she, voicing her own opinion, often heretofore maintained in class discussions against the faction who would ascribe all honor and glory to meter and rhyme alone,— "is language put into print that is excited by imagination. Meter is —" Here memory and courage alike flagged, and she dishonorably had recourse to a pocket Webster, all too much abridged, coming out triumphantly with this treasure: "Meter is a measure of harmony at a length of nearly thirty-nine and a half inches." In her hurry a semi-colon had been lost, and the preposition "at" fell into place by association; her newly acquired "dictionary habit" then prevailed against the conviction that the definition stood for no idea, and the paper was handed in as written.

Fresh from *The Lady of the Lake*, with their imaginations still kindled by their taste of historical fiction and antiquarian lore, the class went gallantly through the *Sketch Book*, undertaking more and more independent library work as time went on, till one beheld the spectacle of children who had never heard of Tennyson laboriously trying to spell out verses of *The Kinges Quhair*, or distractedly thumbing Gray's *Garden and Field Botany* to find out what kind of thing was the "spray of gillieflower," carried into the tower window by the dove, back in those days when Windsor Castle was both a fortress and a prison. Much of it was effort to little purpose, of course, but because the free use of books is a precious craft to learn I was willing to see them waste a little energy on trifles, rather than interrupt their researches and discount their results by ill-timed advice.

The *Vicar of Wakefield* came next, the stimulus of a story renewing at once the somewhat jaded interest of the class. Here more than ever before it was profitable and safe to scrutinize the master's workmanship, to say, "How was it done?" and, "Why was this done so?" I know of no book that affords to a class struggling to write good English such abundant, efficient, practical help as this. The pleasant, simple style, the everyday topics, the transparent reasonableness with which that wonderful craftsman develops a character, introduces an element

of pathos or a touch of gayety, or uses a contrast, are things that a child of thirteen can both admire and profit by.

Last of all, and crowning glory of the year, the class came back to the great wizard, and read *Ivanhoe*. I am not sure but that *Kenilworth* or *Waverly* might have done as well and awakened the same enthusiasm, but certainly no book could have fallen in more neatly with the outside reading which had accompanied the *Lady of the Lake* and the *Sketch Book*. "Douglas of the Bleeding Heart" had sent us to Aytoun's ballad, and the errand of Bruce's heart had drawn us further back to investigate the Crusades. The genealogy of James Fitzjames and the prisoner of Windsor had given us an interest in the English royal house. Then the crusading templar whose effigy Irving saw in the country church, lying with his feet crossed, had provoked interest in the Order of the Temple. In *Ivanhoe* all these lines converged, and there was, beside, fighting and bloodshed enough to satisfy the devotees of "Jesse James" and "Diamond Dick;" while Rebecca and Rowena, associating only with court favorites and twice rescued by royalty itself, far outshone the paler splendors of those modern sentimentalists, who never involve the heroine in a siege and rarely do better for her than an earl. During the five weeks that we spent on *Ivanhoe*, tradition and decorum were so far forgotten that the classes actually groaned when the class bell ended the recitation! They cheerfully undertook to read thirty pages and look up all necessary references therein as their daily task, to be prepared from one day's recitation to the next; though early in September they had protested that one hundred lines of the *Lady of the Lake* was a burden greater than they could bear. It was a fury of enthusiasm that possessed them, growing by what it fed on.

During all the later work on the *Vicar*, *Ivanhoe*, and the final reviews and comparisons of our year's work, I noticed a surprising development of the critical faculty and of standards of literary judgment. I had believed strongly, when I undertook this course, in the receptiveness and innate reasonableness of the ordinary child, if properly approached. Yet I had taken it for granted that all literary judgments were the acquirements of

later years, and so highly artificial in their very nature as to depend upon a deliberate study of criticism for existence. Here were these raw children, unlettered almost, reading a few books, and questioning their structure now and then, but receiving scarcely an opinion from me or from any outsider, suddenly commending and condemning points in character-drawing, plot-structure, proportion, and style, with a keenness of insight and a breadth of judgment that need not discredit a Coleridge or a Hazlitt. True, the form of their comments was often crude and uncouth; but the idea was there. Moreover, they were surprisingly unanimous on most points; a trifling incident given undue length and importance in a story did not come off with one protest, or with twenty. They were the keenest critics on the score of probability that I ever found; the veriest trifles were weighed and remembered, and their researches now and again led to an odd discovery; as, for example, that the ages of the younger children of the Primrose family, if tested and applied at every turn, quite upset the chronology of the book. For the *Lady of the Lake*, we had a map of the Trosachs and Loch Lomond; for *Ivanhoe*, we traced King Richard's return from Palestine, through his captivity, and on to England, followed Cedric and Ivanhoe and the templar about on the map of England, and even adorned our blackboards with ground plans of the Ashby tilt yard and the castle of Torquilstone, drawn as accurately as might be!

Upon comparing the June examinations with the set of papers which I had found so encouraging in December, I may own to an honest satisfaction and pride. The improvement in thought and in language was marked. What was more, the improvement did not mean a temporary concession, a temporary imitation of the teacher's tone, in order to earn a higher grade; rather, the pupils had improved themselves, the change marking an inward growth which was more than a temporary gain. In addition, some of them had acquired a taste for well-written books and could not return to the old favorites; I learned later on of several such cases.

In looking back upon this experiment, I am more than ever convinced of the value of teaching English, whether rhetoric

composition, or literature, in connection with, and by means of, the reading of some vivid narrative. To appeal to the imagination and to the order of thought which is natural to the mind is to discover a line of least resistance. And if we can teach along a line of least resistance, is it not a gain?

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ANALYSIS OF THE FAILURES IN FRESHMAN MATHEMATICS.

It is my purpose to discuss in the following paper some of the causes which contribute to the failure of students to do successfully the work in freshman mathematics. This of necessity involves a discussion of the work of the public schools and in particular that done in the high schools. In this discussion, however, it must be borne in mind that the high school does not exist exclusively as a fitting school for college. It has other and perhaps more important functions to perform. It is above all a local institution, and local conditions are and should be an important factor in shaping its curriculum. It is the most democratic educational institution we possess, and offers in most cases the only opportunity the boy or girl has for a practical as well as a liberal education. Its efficiency in discharging its local obligations should be enhanced in every possible way, and any suggestion of a reform should not be given a serious consideration which cannot be shown to be in perfect harmony with this idea.

A mistake which all instructors are apt to make is to lay the shortcomings of their students at the door of the teacher or the institution charged with their preparation. Too often, also, we set up an ideal standard of proficiency which we should like our students to have upon beginning our work in order to best enable us to meet the demands laid upon us, and then we expect the teacher lower down the line some how to meet this condition without at the same time considering as carefully as we should whether it is possible for that teacher, under the limitations placed upon him, to do so. This results in crowding the lower strata of our educational system with too much work and often with work beyond the mental grasp of the pupil who has reached that stage of his educational development. This is perhaps nowhere more apparent than in mathematics. Any adequate discussion of high-school preparation in mathematics must

include, therefore, a discussion of college work on the one hand and grade work on the other.

One of the consequences of being a specialist and knowing intimately but one phase of a student's work is that the college professor recognizes more readily the deficiencies of students in his particular field than in any other, and often hastily concludes that they enter college with poorer preparation for the work of his department than that of others. Such a conclusion, however, cannot be accepted until we have taken into consideration all of the evidence in the case as presented by the college records. Without question the best test which we can apply to the student's preparation to do successfully the work expected of him in his freshman year at college is the record which he makes during that year. His preparation may not have been all that could be desired, but the fact that he passed and received a credit at the hands of his instructor is indisputable evidence that his preparation was, in some measure at least, satisfactory to the department. For the purpose of a comparative study, I have tabulated below, for the first semester of this year, the per cent. of failures at the University of Illinois in mathematics, rhetoric, chemistry, and first-year language, including French, German, Latin, and English. The reason for selecting these particular subjects is that they are not only representative of different lines of study, but are taken by a large number of students—and, like mathematics, are prescribed subjects for certain groups of students. The results of this comparison are as follows:

Subject.	Per cent. of failures.
1. Mathematics:	
Algebra, - - - - -	15 per cent.
Trigonometry, - - - - -	15 per cent.
2. Chemistry, - - - - -	16 per cent.
3. Rhetoric, - - - - -	10 per cent.
4. First year language:	
Latin, - - - - -	No failures.
German, - - - - -	19 per cent.
French, - - - - -	15 per cent.
English Literature, - - - - -	3 per cent.

Of these subjects, the courses in chemistry, German and French present the elements of the subject and require no previous training in the high school. Of the others, all of which

are based upon certain training obtained in the secondary schools, the largest per cent. of failures occur in mathematics. It will be urged by some that as mathematics is an exact science, the errors of the students stand out more strikingly than in the other subjects and hence are apt to be magnified in making up the final grade. It may be urged with equal fairness that for the same reason the successes stand out in greater prominence and hence are apt to be magnified in our grading. Moreover, the argument that this contributes to the large number of failures in mathematics as compared with English, for example, seems to lose its validity when a comparison is made with French and German. The question also arises as to whether the comparatively large per cent. of failures in mathematics is not peculiar to this university, due perhaps to the severity with which we grade our students. This question is answered by a consideration of the following data, obtained from the universities of Indiana, Purdue, Michigan, and Wisconsin, where, as here, a system of accredited schools is maintained. These four institutions, together with the University of Illinois, represent a total enrollment of 1,328 in college algebra and 1,065 in trigonometry. The average per cent. of failure in these five institutions was 15 in college algebra and 11 in trigonometry. From this, it will be seen that the per cent. of failures at the University of Illinois was exactly the average in algebra, while in trigonometry it is somewhat larger. This relatively large per cent. of failures in trigonometry is due, in part at least, to two causes; first, in some of the institutions mentioned trigonometry is made to follow college algebra, thus coming after the student has regained his grasp of the elementary mathematics; second, at the University of Illinois certain groups of students are permitted to take trigonometry without taking college algebra at all.

A further study of those cases where the work has proven unsatisfactory should disclose some of the causes which led to the failure. From this analysis, we obtain the following data:

FAILURES.

70 per cent. finished elementary alg. in first or second year of the high school.
22 per cent. finished elementary algebra in third year of the high school.

8 per cent. has some elementary algebra in the last year of the high school.
18 per cent. had had elementary algebra the previous year.
18 per cent. had not had elementary algebra for two years.
64 per cent. had not had elementary algebra for three or more years.
32 per cent. had spent one year or less on elementary algebra.
51 per cent. had spent *between* one and two years on elementary algebra.
17 per cent. had spent two years on elementary algebra.
None had spent more than two years on elementary algebra.

The significance of this data is more evident when we compare with it the cases where the student made an exceptionally good grade, say from 90 to 100 per cent. In a very large per cent. of these cases either the student had had some review of elementary algebra the previous year, or had spent two or more years upon the subject, or had been out of school for some time and hence was more mature and in many cases had in the meantime taught elementary algebra.

It is no doubt true that the per cent. of failures would be materially reduced if more time could be devoted in the freshman year to the study of algebra and trigonometry. This, however, is impossible in those institutions like the state universities, where engineering departments are maintained; for, in the first two years of the college course not only must algebra and trigonometry be covered, but also analytical geometry and calculus, in order that the engineering students may study during the last two years the applications of these branches to technical subjects.

The above data seem to indicate that either two or more years should be spent on the subject of algebra, or that the time spent on this subject should be so distributed that a portion of it should come as late as possible in the high-school course. Because of the obligations placed upon the high school other than that of a fitting school, it is perhaps unreasonable, if not altogether impossible, for the accredited school to meet the first of these conditions. This, however, does not apply to the second alternative. This is something which the high schools can do, and certainly should do, in order to promote in the highest degree the best interests of their pupils. The above statistics show precisely the condition of affairs which a careful

consideration would have led us to expect. Certain portions of the algebra are sufficiently abstract to be beyond the ready comprehension of pupils in the first two years of the high-school course. For example, the theory of quadratic equations, a proof of the binomial theorem, the general theory of exponents with operations involving complicated radical expressions, and simultaneous quadratic equations are illustrations of what might better be postponed until later. By attempting to teach these subjects in anything like a rigorous and satisfactory manner at this period in the high-school course, we do more serious damage than merely to waste the pupil's time. Because the mathematical principles which underlie these subjects are beyond his ready comprehension, the pupil easily comes to regard them as so many things to be taken for granted, and the teacher, finding it impossible to secure (except from the brightest of the class) anything more than mechanical work, does not insist upon more. As a consequence, the less brilliant pupil comes naturally to feel that somehow the whole thing is beyond him, and that he must have been born especially deficient in mathematical instinct. While it is doubtless true that all people could not become great mathematicians any more than they could acquire great eminence in any other line of scientific study, yet it is not too much to maintain that any pupil of average ability can acquire a reasonable knowledge of elementary mathematics, and will do so with pleasure to himself and satisfaction to his instructor, providing the subject-matter is presented to him at the right time and in legitimate doses. It is entirely possible to destroy a natural taste for mathematics by crowding the pupil forward too rapidly in his course. This is as true of the work in the grades as in the high school. In fact, the pupil's interest in any given subject depends in no small degree upon the *time* at which it is presented. This is quite as important as the *manner* in which it is presented. In my estimation, we waste much valuable time of the pupil by attempting to teach arithmetic too early in the grades. In answer to a query as to why he had the elementary number work, including the multiplication table, taught so early in the grades, a city superintendent in this state once said to

me: "They might as well be learning that as anything else, and then it will be out of the way and ready for use when they come later to take up the formal study of arithmetic." Is it possible that superintendent thought the child's mind a sort of cold-storage plant, where the facts of human knowledge could be dumped at convenient times and in any order, to be produced fresh and ready for use upon future demand? This is not sound pedagogy. It is sure to produce a chronic case of mathematical nausea, more difficult to cure than the chronic ills of a physical nature.

As to the distribution of the time devoted to mathematics in the high school, I would suggest that the first year be given to the study of the more elementary portions of the algebra. This should include enough to enable the pupil to do successfully the work in geometry and physics, say covering the work as ordinarily presented up to and including the solution of single quadratic equations having numerical coefficients. In the second year, I would recommend plane geometry, and in the third physics. In the fourth year, I would suggest a review of the fundamental operations of algebra, including more difficult exercises in factoring, theory of exponents and radicals, and a thorough drill in simultaneous quadratics and those equations of higher degree which may be solved like quadratics. This would require perhaps one-half of the last year. The remaining portion of the year might be devoted to solid geometry.

To be sure, not every subject can claim the attention of the pupil during the last year of the high-school course. Is it not reasonable, however, that subjects like mathematics, which require the highest development of the reasoning faculties, should be given a preference? On the other hand, those sciences which, as taught in the high school, are largely observational sciences, might just as well, perhaps better, come earlier. The same is true of those literary studies which have for their primary object the perfection and extension of the pupil's vocabulary either in his own or in a foreign language, and likewise of those studies, as history and civics, which aim to teach the pupil a certain definite mass of informational data.

It must be at once apparent that the pupil intending to complete a college course would be given a decided advantage by taking his preparatory training as indicated. First of all, he would enter college fresh from his high-school mathematics, and this means a much more definite mathematical stock in hand as a basis for his college work than would otherwise be the case. This is of greater importance in mathematics than in any other subject; for at most institutions, as, for example, at the University of Illinois, every student not enrolled in the professional schools is expected to take mathematics during his *freshman* year, with the single exception of certain students in the college of agriculture. This cannot be said of any other *one* subject. Furthermore, while many other subjects require only a general training and maturity as a sufficient preparation for college work, in mathematics the student must have not only this general training and development, but he must possess in addition a definite fund of technical knowledge upon which to base his subsequent work. This is the more important in mathematics because one of the general divisions of the science, namely algebra, is not completed in the secondary schools but the freshman work takes up the subject in the middle and carries it on to completion. By the arrangement suggested, not only would the continuity of the student's mathematical study be preserved, but he would enter college with a better spirit toward and a deeper interest in the work of his freshman year.

There is another reason why the above distribution of the time devoted to mathematics seems best. This concerns the pupil who does not intend to pursue a college course. His plans in this regard will be most likely matured by the time he begins his last year of the high-school course. In case he does not propose to go to a higher institution of learning, it seems to me that his time might be more profitably spent in this year by studying other subjects than the mathematics suggested. If he is to go at once into active life, he might better, perhaps, spend this time in the study of bookkeeping and commercial arithmetic, or in additional work in history, literature, or a foreign language.

It may be of interest in this connection to see how far the plan suggested is followed by the high schools of Illinois. Through the kindness of Mr. Bonzer, a fellow at the University of Illinois, I was able to obtain the necessary data from 297 high schools of the state. This list includes 95 per cent. of the high schools recognized as such by the state superintendent in his last report. Moreover, it includes all the accredited schools of the University of Illinois with the exception of five. Of these schools 70 per cent. finish the elementary algebra in the first two years, and less than 5 per cent. have any algebra in the last year. This condition of affairs seems to indicate, therefore, that some change in this regard is needed.

The completion of the mathematics too early in the high-school course is certainly not the only cause of the student's failure to do creditable work in freshman mathematics. When we study the record of our students by the schools in which the preparation was made, other causes than the one mentioned become apparent. I have endeavored as best I could at long range to investigate several of the cases where the record seemed to indicate that mistakes were being made. While the results of this study have been more or less unsatisfactory, yet enough data have been gathered to show that in some of our schools, at least, more attention should be paid to mathematics as a basis of promotion in the grades below the high school. The pupil cannot be expected to do good work in the mathematics taught in the high school who has been permitted to pass a grade where an essential part of arithmetic, as, for example, common fractions are taught, without doing the work of that grade. Mathematics is a progressive science and the connection of one topic to another is so vital that unless the pupil does each well in turn he is bound sooner or later to get beyond his depth, which means at least discouragement and most likely ultimate defeat. No matter how efficient the high-school teacher of mathematics may be, unless the work in the grades has been thoroughly done, his work is vitiated and the *pupil* reaps the consequences.

Another important element to be considered is the proper

correlation of the various branches of mathematics. We teach these branches too much as distinct subjects. As the boy passes from arithmetic to algebra, he should not feel that arithmetic is a closed book and that he is now commencing an entirely new line of study. He should be made to see the relations between the two and the applications of his algebra to his arithmetic, and to feel that he has now an additional tool at his command which will enable him to solve many of his former problems with greater ease and facility. In fact, while I should advocate the postponement of many of the topics of formal algebra as late as possible in the high-school course, I should urge that the first principles, so far as is necessary to make use of the simplest equations of the first degree, be introduced into the arithmetic. If not formally, we do in fact use the *idea* of the equation in solving many of these problems, and the introduction of the algebraic equation would not only facilitate the work of the arithmetic, but would prepare the way for and show the advantage of the formal algebra to be studied later. In the same way, after the pupil has had geometry, we should introduce into his subsequent algebra some work in the loci of equations, to the end that he might see the connection between the geometric interpretation of the equation and its analytical statement. This would not only add interest to the subject, but would give the very best preparation for his study of analytical geometry when he enters upon his college course.

Another deficiency too often noticeable in the freshman student is his inability to reason mathematically, to analyze readily a given problem and to state in mathematical terms the conditions involved. This deficiency may be due in part to the immaturity of the student, but it is doubtless also the result of a lack of training. Training of this character, whether it be in mathematics or elsewhere, is of the greatest value; for, it leads the boy to think for himself, and it is more nearly related to and is a better kind of preparation for independent research later than anything else which he does in the high school. Problems which best serve this purpose are either of the nature of supplementary propositions or the practical application of mathematics

to the solution of some problem in the physical world. This side of a mathematical training cannot be emphasized too much. It not only stimulates an interest in the subject, but makes the boy feel that he is dealing with something that is tangible and which gives him a power he did not before possess. On the other hand, the disciplinary value of the subject is increased rather than lessened by such applications. This is an additional reason why some of the high-school mathematics should follow physics.

So far in our discussion, we have not taken into consideration one important element, perhaps the most important element, in the successful preparation of a student for college work, namely the character and training of the teacher himself. Aside from that general training and ability which he should have in common with his fellow instructors, the high-school teacher of mathematics should have a special training in the particular line in which he is to give instruction. This special training should be sufficiently extensive to make him not only a master of his own subject, but also familiar with the other subjects with which his is directly related. The question is therefore quite germane to our discussion as to what should be the minimum preparation demanded of a high-school teacher of mathematics in his own and kindred lines that we may be insured of the best results.

It needs no argument to show that any teacher should know more of his subject than he is called upon to teach. School authorities are everywhere more and more recognizing the advantage of having teachers in charge of the various departments who are to some degree specialists in their respective fields. It is well that it is so, providing that it does not mean at the same time a narrowing of the intellectual horizon and training of the instructor. For some reason, however, we seem to have been slower to recognize the desirability, if not the necessity, of specially trained high-school teachers of mathematics than of the natural sciences and the languages. The opinion seems to be still entertained in many quarters that almost anyone will do to teach mathematics. This is clearly an error. On the other hand, we should not demand the same amount of special training

of a high-school teacher as would be expected of a college instructor in the same line. What, then, should be our standard? First of all, our teacher should know the possibilities and the limitations of public-school work, including the work of the grades, to the end that he may put himself in touch and sympathy with his pupils as they enter the high school. The instructor in charge of the mathematics in the high school should be the superintendent's most competent adviser concerning the mathematical work in the grades. If he is not familiar with this work, he should embrace the first opportunity to become so. His training in the higher mathematics should be sufficiently extended to include those branches for which his work directly prepares. In order to be able to point out to his pupils the significance of mathematics in its relation to the study of other branches of science, it is desirable that his training should include work in the applied as well as the pure mathematics. Such a preparation should include in pure mathematics courses in college algebra, analytical geometry, differential and integral calculus, and the theory of equations. In applied mathematics, he should have taken college work in general physics, mechanics, and perhaps astronomy. The work here outlined would require two years of college work in pure mathematics and perhaps a year and a half in the allied subjects. This is suggested as a *minimum* preparation for the instructor placed at the head of the mathematical department of a large high school. More is desirable. He would find it of advantage to have studied descriptive and modern geometry, to know something of the theory of functions with its applications to the mathematical physics, and to be familiar with the history of elementary mathematics. Many will regard this standard no doubt as too high, and will easily recall instances where teachers, who have not had the equivalent of this training, have nevertheless been regarded as efficient instructors of mathematics. However true this may be, it must be acknowledged that the character of instruction given by those same teachers would be improved rather than otherwise by the mathematical outlook which this training would have given them. There would be none of the hesitating and labored pro-

cedure so noticeable with the teacher not a complete master of the situation. There would be a definiteness of purpose in the work given and a familiarity with mathematical facts and principles which would inspire confidence, arouse enthusiasm, and show at once how real and important an element in a practical as well as a liberal education the study of mathematics is. There would be no false conceptions given, to be unlearned when the pupil enters college. Under such direction, the interest and spirit with which the student would take up his work in freshman mathematics would be greatly increased, for after all this is in a large measure the result of his high-school training.

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THE DETERMINING FACTORS OF THE CURRICULUM OF THE SECONDARY SCHOOL¹

SINCE the days of ancient Greece the curriculum of the secondary school has undergone many changes. As educational ideals have been modified, at times even to the point of revolution, so courses of study have been as often recast. One of the most encouraging truths which is revealed by even a dilettantish study of the history of education is that a compulsory curriculum for all succeeding generations of men is not only undesirable, but also positively impossible. This paper, therefore, without attempting to set up a curriculum to be worshiped by the schoolmasters of the present and the future, will be restricted to the discussion of general principles which should guide intelligent authorities in mapping out the work of the secondary school. These principles will be briefly discussed under two heads, viz.: (1) civilization as a great determining factor; and (2) the individual student to be educated as the other.

I. CIVILIZATION AS A DETERMINING FACTOR.

The school is not an artificial institution existing for and by itself. It finds its reason-to-be in the needs of civilized life, and its chief glory in administering to those needs. Man is pre-eminent in the animal kingdom because he is an institution-building animal, his highest wisdom being displayed when he perfects the school, by which insight is attained into other forms of institutional life, and by which, as a result of this insight, civilization is strengthened and enriched. If the doctrine be accepted that the school is maintained for the sake of civilization, it follows that the arbitrary, artificial curriculum, born of pedantry, or of zeal not according to knowledge, or of anything else tending to divorce the school from the world and its work, is not to be tolerated. The one great question, the correct answer to which will determine the culture-material seeking

¹ A paper read before the Texas State Teachers' Association.

recognition in the secondary school is : *Does it have such characteristics as give it organic relationship with the development of man for intelligent and effective service in and for civilization?*

It would not be difficult to frame a curriculum which would conduce more or less to the training of the so-called faculties of the mind, and which would, nevertheless, have little, if any, value so far as the demands of civilized life are concerned. As illustrations of this truth, one easily calls to mind the folly of scholasticism and of all forms of ascetic education. The important fact to be kept steadily in mind, is that it is the civilization of the present (emphasis being placed, of course, upon its higher elements which are ever looking forward to the evolution of the future civilization from that of the present), which is to exercise determining power with respect to the studies to be assigned to the secondary school. The emperor of Germany, in his opening address at the famous school conference in 1890, manifests at least partial comprehension of the importance of adjusting school programs to modern needs, as the following extract from that address gives evidence :

The main trouble lies in the fact that since 1870 the philologists have sat in their *Gymnasien* as *beati possidentes*, laying main stress upon the subject-matter, upon the learning and the knowing, but not upon the formation of character and upon the needs of life. Less emphasis is being placed upon practice [*können*] than theory [*kennen*], a fact that can easily be verified by looking at the requirements for examinations. Their underlying principle is that the pupil must, first of all, know as many things as possible. Whether this knowledge fits for life or not, is immaterial. If anyone enters into a discussion with these gentlemen on this point, and attempts to show them that a young man ought to be prepared, to some extent at least, for life and its manifold problems, they will tell him that such is not the function of the school, its principal aim being the discipline or gymnastic of the mind, and that, if this gymnastic were properly conducted, the young man would be capable of doing all that is necessary in life. I am of the opinion that we can no longer be guided by this doctrine.

To return to schools in general and to the *Gymnasium* in particular—I will say that I am not ignorant of the fact that in many circles I am looked upon as a fanatical opponent of the *Gymnasium*, and that I have therefore often been played as a trump-card in favor of other schools. Gentlemen, this is a misapprehension. Whoever has been a pupil of a *Gymnasium* himself, and has looked behind the scenes, knows where the wrong lies. First

of all, a national basis is wanting. The foundation of our *Gymnasium* must be German. It is our duty to educate men to become young Germans, and not young Greeks or Romans. We must relinquish the basis which has been the rule for centuries, the old monastic education of the middle ages, when Latin and a little Greek [*einbisschen Griechisch*] were most important. These are no longer our standard; we must make German the basis, and German composition must be made the center around which everything else revolves.¹

I have intimated that the German emperor's insight into the matter at issue was only partial. His idea that the schools of the German nation are to cultivate Germans, should it have free and unlimited course would forever arrest the development of Germany at the civic grade of culture, making it then impossible for her to arrive at the higher stage of human culture, which is the dominant idea in modern civilization. The doctrine for which this paper contends is, not that the school should make only Germans, or Americans, or Englishmen, but that the all-controlling purpose of the schools of every nation should be to make men who, by no means delinquent with respect to civic duties, have an abiding sense of their obligations to humanity. The lives of such men are in harmony with the spirit and the letter of the declaration of the Roman emperor, "As Antonine, my country is Rome; as a man, the world."

It is this doctrine of real humanism in which Huxley believed, his faith being nowhere more clearly expressed than in this paragraph, to be found in his address delivered in 1868 at the South London Working Men's College:

The politicians tell us that you must educate the masses because they are going to be masters. The clergy join in the cry for education, for they affirm that the people are drifting away from church and chapel into the broadest infidelity. The manufacturers and the capitalists swell the chorus lustily. They declare that ignorance makes bad workmen, that England will soon be unable to turn out cotton goods or steam engines cheaper than other people; and then Ichabod! Ichabod! the glory will be departed from us. A few voices are lifted up in favor of the doctrine that the masses should be educated because they are men and women with unlimited capacities for being, doing, and suffering, and that it is as true now as it ever was, that the people perish for lack of knowledge.²

¹ *Educational Review*, Vol. I, pp. 202-3.

² HUXLEY, *Science and Education Essays*, p. 77.

Huxley was too broad to be only a Briton. He understood that the common element in humanity, reason, is that which makes human culture possible, and that, in proportion as this element, rather than the accidental circumstance of nativity or race, or power, or wealth, is honored in a nation, is the true life of the nation advanced and are the higher interests of humanity subserved. One could not, for example, doubt that if both the British and the Boers had been guided by the dictates of reason, the war in South Africa would have been impossible; and that, if Spain in her conduct toward the Cubans had been reasonable, she would not have lost her possessions in the western world.

The contention that the curriculum of the secondary school should be fashioned according to the ideals of modern life, implies that past systems of education in their totality are to be looked upon with suspicion, for they prevailed in times far different from our own, and they were maintained to suit views of life in many particulars directly at variance with the notions we moderns cherish. It is not contended, however, that everything in the past is to be ignored, simply because it is in the past. One can conceive of no stronger evidence of educational insanity than failure to recognize that the present is the result of evolution from the past, and that existing ideals are but the union of past ideals which, by reason of their permanent value, have survived.

Taking it for granted that no one will question the claim of modern civilization to be a determining factor in the formation of the curriculum of the modern secondary school, it may be well to review the more important particular lines of culture this factor determines.

In the first place, training in language is of primary importance. As Aristotle pointed out centuries ago, language, constituting as it does a characteristic difference between man and brute, makes possible bonds of social union founded upon the needs other than those of mere nature, and consequently furnishes an indispensable basis for human culture. It is through the real study of language that insight is to be gained into the nature of thought, and it is, therefore, language-study that forms

an important part of the great thought-group of studies in the world of learning. Any instruction in language which regards the mere forms of thought as of transcendent importance, and which disregards the real thought itself, tends to cultivate a habit largely prevalent even in our own day, the habit of talking volubly without actually saying anything.

The study of language, furthermore, furnishes the means whereby the pupil may become possessed of that great inheritance to which he is entitled, and which embraces the greatest of all the arts, literature. There is no surer evidence of the highly civilized man than that he is a lover and a reader of the best books, those books which reveal with transcendent beauty and power the struggles of the human spirit toward the realization of its highest ideals. If the educational system of the old Greeks has in it any lesson for the schoolmaster of today, it is this: The nation which cultivates assiduously in the minds of the young the knowledge and appreciation of great classics is engaged in a work of the highest practical importance, for it is doing that which vitally affects its own moral and spiritual welfare, and it is as true with respect to nations as to individuals that only moral and spiritual excellence can endure—a truth which may be overlooked in these days of territorial expansion, of billion-dollar industrial investments, and of stupendous material development in every direction.

The subject of language-study may be looked at from another standpoint. In the elementary school the pupil learns in an empirical and fragmentary way something of his own language; in the secondary school he should begin the reflective study of the vernacular in order that he may eventually gain such mastery of it as will insure him the ability to use it with ease, precision and power. The belief, widespread for many centuries, that the youth could, without sustained and systematic effort, acquire this ability, has not until our own day manifested signs of obsolescence. Leaders of educational thought are now, however, agreed that the "acquisition of a competent knowledge of English is not an easy, but a laborious undertaking, for the average youth—not a matter of entertaining reading, but of serious study; that

indeed there is no subject in which skilled and systematic instruction is of greater value."¹ With respect to paying serious attention to the vernacular, the ancient Greeks have given the world another valuable lesson, for their linguistic training was acquired exclusively through the medium of their own tongue, other languages being absolutely proscribed.

The folly of attempting to substitute a foreign language for the vernacular in the training of the young is nowhere illustrated better than in the utter failure of the famous schoolmaster, Sturm, in his experiment, carried on for a long series of years in Strasburg. With a determination which would brook no opposition, he endeavored to restore the long-lost skill in the use of the two great languages of the Greeks and Romans. He, accordingly, prohibited both teachers and pupils from conversation in German. Even games were not permissible without the condition that the speech employed therein be confined to Latin. His aim, which was to denationalize the young Germans, was not forgotten by him for a moment. His lengthy and detailed directions to the teachers of the several grades in every instance had direct bearing upon the accomplishment of his great purpose, which was to see the men of his own age writing, haranguing, and speaking Greek and Latin with power equal to that which flourished in the noblest days of Athens and Rome. After a long series of years spent in earnest endeavor to accomplish his cherished idea, he himself confessed his total failure; but, strange to say, he ascribed the cause of failure to the teachers and himself, and not to the fact that Latin was not the native tongue of the boys he had been training. Nevertheless, even Sturm could not help realizing that eloquence is by no means confined to Latin, for he observed that Italians, Spaniards, Frenchmen and Germans could be eloquent in their own tongues. With respect to Luther, he said:

"Had there been no Reformation, had the sermons of Luther never appeared, and had he written nothing at all save his translation of the Bible, this alone would have insured him an immortality of fame. For, if we compare with this German translation either the Greek, the Latin, or any other,

¹ ELIOT, *Educational Reform*, pp. 99, 100.

we shall find that they are all far behind it both in perspicuity, purity, choice of expression, and resemblance to the Hebrew original. I believe that, as no painter has ever been able to surpass Apelles, so no scholar will ever be able to produce a translation of the Bible that shall excel Luther's."¹

But, because the work of the world demands that each worker be familiar with his own language, and be able to levy great contributions upon it, it is by no means certain that the modern secondary school should be patterned after that of ancient Greece by forbidding the study of a foreign language. The Committee on College Entrance Requirements, in its report made to the National Education Association in 1899, is distinctly favorable to the study of foreign language. It is not necessary, I take it, to enter into an extended argument to show the justice of this position. The value of the literatures of Greece and Rome can be questioned by no scholar. How these literatures are inextricably interwoven with the modern literatures is evident upon the most superficial examination. It is, therefore, easy to conclude that the study of ancient literature will directly, as well as indirectly, aid one in the appreciation of modern. Furthermore, the linguistic training to be derived from the study of a foreign language, ancient or modern, is of positive value with respect to the vernacular. There is no better training in English than that which requires a translation from a foreign tongue into the idiom of our vernacular. The opinion is here advanced that by high-school students that will not go to college, as well as by those that will have the privilege of instruction in higher institutions, benefit of the highest order is to be derived from three or four year's study of at least one foreign language.

Another human nature study which is demanded by modern times is that of history. The value of this subject with respect to guidance and also to discipline has in recent years been acknowledged. History is not concerned so much with names and dates and isolated facts, as it is with human motives connected therewith. It is not so much interested in any given set of details as it is with the principles by which those concrete data are bound together in a series of causes and results. The study of history should, therefore, afford the student a basis for the interpretation of modern life. It is believed that the stage of adolescence, which is the high-school stage, is a particularly opportune time for the study of that subject which deals with the significance of human action, and which gives to the youth entering upon the transition stage just preceding manhood conceptions of many-sided human nature. In the elementary

¹ BARNARD, *German Teachers and Educators*, p. 222.

school the child is taught through stories and narratives and biographies many things which will be of service in his future historical study ; but it must be borne in mind that this elementary work is scarcely to be considered as real history. The world needs men that are students of relations, that can gather facts, classify them, and interpret them, and that can understand processes of transformation of idea into reality. Certainly, there is no greater demand made upon the citizen of a modern state than to be able to do just such thinking as is required in anything like an adequate study of history.

It is not necessary to discuss at length other secondary-school subjects determined by modern civilization ; but they cannot be dismissed without a word. The intricate and almost infinite application of mathematics to the industrial arts is sufficient justification for its place in the program of the secondary school. Mathematics is the tool by which man has conquered nature, and it must forever remain an effective instrument for ministering to man's comfort and convenience. Its disciplinary value has been greatly overrated, because it has been believed to extend to fields of discipline to which, by reason of its nature and limitations, it must forever be foreign ; but its value for the training of observation and reasoning with respect to the phenomena of its own field, is incalculable and indispensable, and civilization is in no whimsical mood when she demands that the school afford excellent opportunity for the acquirement of mathematical knowledge and discipline.

The great natural-science realm of learning has likewise received the unmistakable approval of modern civilization. The time was when it was considered unworthy and even impious to study the phenomena of nature. Within the last century, however, through the marvelous contributions of science, she has demonstrated her worth as a necessary factor in human life. It may be truly asserted that more and greater changes have been wrought by science upon our material life within the last few years than have been wrought in any thousand years before the nineteenth century. It may be said, furthermore, that the method of science, as well as its progress, has no small effect

upon the spiritual side of man, for its method is the only true method to be employed in the study of any problem, endeavoring, as it does, to cultivate an open attitude of mind, the love of truth, the willingness to adopt it, and the courage to stand for it. If the school is to be kept in touch with real life, it cannot afford to neglect this great group of subjects, which is admirably adapted to give the youth such training as will enable him to feel at home in this world, and to face it at least without fear.

Again, the needs of modern life make large drafts upon the physical forces of man. In no former age of the world have health and strength and endurance been so desirable and so necessary. That the obligations to meet these demands are scarcely acknowledged by the makers of school programs, is no evidence that the obligation does not exist. It has been demonstrated beyond all doubt, and over and over again, that development of mind without training of the body is a useless, not to say a wicked, system of education, and yet adequate provision for physical training is to be found in comparatively few secondary schools in America. Here is an opportunity for a reform to be led by an educational crusader worthy to rank with Pestalozzi and Horace Mann.

Let me briefly recapitulate the discussion up to this point:

(1) Civilization is a determining factor of the curriculum of the secondary school. (2) The civilization that is a determining factor is modern civilization. (3) Modern civilization requires that the secondary school curriculum provide (a) for physical training; (b) for language, including the vernacular and foreign tongues; (c) for representatives of other great groups of subjects pertaining to human nature; and (d) for yet other groups of studies relating to the natural world.

To summarize the whole matter, modern civilization requires that the many-sided phases of modern life which are concerned with problems pertaining to the external and internal worlds, be considered as the objective basis of the curriculum, and that due regard be paid to each of these several phases. To adopt a fragmentary view by over-emphasising a study adapted to one

phase only, is the result of distorted vision, and will, in the end, defeat its own purpose. All forms of human activity are sacred, and all subjects having for their ultimate purpose the development of these several activities are equally important and honorable.

But, while it is demanded that representatives of all the great groups of learning be found in the school curriculum, our civilization, more than any other the world has ever known, believes in the wisdom of division of labor, and, consequently does not ask that the curriculum be the same for all pupils, regardless of qualifications and regardless of individual characteristics and interests. This statement leads to the discussion of the second determining factor of the curriculum of the secondary school.

II. THE INDIVIDUAL AS A DETERMINING FACTOR.

By wise men who are guilty of the folly of setting up a theory and then compelling facts to conform thereto, it is argued that the wisdom and experience of schoolmasters should, at least by this time, have been able to evolve a uniform course of study well suited to all youths aspiring to a liberal education. The human mind is ever searching for unifying principles, and it is no wonder that it has been a favorite doctrine of educators that there is one plan of education, in comparison with which other schemes are decidedly inferior. For years in the olden time the trivium, consisting of grammar, rhetoric, and dialectics, was considered the sacred trinity of the secondary school; and it is a well-known fact that since the curriculum of the Renaissance was enthroned in the pedagogic heart, many of the greatest scholars and greatest teachers have honestly believed that in Latin, Greek and mathematics is to be found another sacred trinity, and that they are the only disciplinary studies *par excellence*. No one can exaggerate the blessings to the human race following the discovery of the languages and literature of Greece and Rome. For the revival of humanism, whose chief instruments were the classics, the modern world cannot have too great reverence; of the intrinsic values of Latin and Greek and mathematics as instruments of culture today, it

would be difficult to form too high an estimate. But, in order to accord high honor to these three subjects it is not necessary to declare that they shall be studied by all people desirous of obtaining a thorough education. To prescribe them for all students simply because of their disciplinary value is assuming that all minds are patterned after a common mold and are, therefore, responsive to the same forms of discipline. The belief that there is a uniform boy is a myth, and any system of education founded upon that myth is irrational.

It is just at this point that the modern graded school system is most vulnerable. The greatest weakness of that system, and the one which in recent years has been most clearly pointed out, is the policy which makes the idea of uniformity dominant, the policy which is founded upon the delusion which contends that all children are born with equal and like powers of mind, and that the same treatment of these powers in different individuals will produce the same results. Now, upon even slight observation and reflection, every one reaches the conclusion that children are not born equal as to mental power any more than they come into this world equal with respect to physical being. Everyone knows that even children found in the same family manifest the greatest differences as to mental characteristics and adaptations. Any institution, therefore, which by uniform treatment seeks to destroy the personality of the individual, is pursuing a policy which prevents both the individual and society from enjoying the development of his peculiar talents to the highest degree.

In the selection of culture-material for the elementary school, it is not so necessary to regard the characteristic differences of children, because the elementary course of study is primarily intended to place the child in possession of the school arts, which he will afterward use regardless of the branches of learning his special powers and interests may lead him to undertake. This view with respect to the elementary school is itself questioned by some; but the student in the secondary school has certainly reached the age when he begins to disclose his individual interests, and school authorities can perform no greater service to him and to the world than to furnish him abundant

opportunity to follow the lead of his special aptitudes. If the secondary school were so conducted as to convince parents that it furnishes every youth what is best for himself, and if the youth were likewise possessed of the same idea, we would never again be called upon to listen to a series of answers to the question, Why are so few boys to be found in the higher grades of the public schools?

That colleges and universities are recognizing the wisdom of consulting the needs of the individual is evidenced by the fact that their courses of study are largely optional. In our own country there is not a reputable institution of higher learning in which the old four-year curriculum, prescribed for all students, obtains. In Germany for many years absolutely free election of university courses has prevailed. The American universities have further shown their disregard of the idea of uniformity by allowing different studies to be presented for entrance. The president of the oldest university in this country, in his annual report of 1896-7, thus expressed the view which has year by year been gaining in popularity among thoughtful students of education:

The future attitude of Harvard is likely to be, not continued insistence upon certain school studies as essential preparation for college, but insistence that the gate to university education should not be closed on the candidate in consequence of his omission at school of any particular studies, provided that his school course has been so composed as to afford him a sound training of some sort. . . . Harvard University has long represented the principle of election of college studies, and had found nothing but advantage in the application of that principle. It is natural that the college should seek to further the adoption of the same principle in secondary schools and in requirements for admission to college.

The University of Texas is in harmony with the modern view on this subject, for the only absolute requirements for entrance are English and elementary mathematics (algebra and plain geometry). The history requirement may be absolved in four different ways—by presenting general history or American history or English history or by a combination of English and American history. The other entrance requirements are elective. Of foreign languages one or more may be selected from

the group composed of Latin, Greek, French, German, and Spanish, and the privilege of election is extended with respect to the natural sciences, physiology and hygiene, physical geography, botany, physics, and chemistry.

The chief objection urged against any attempt to consult the special preference and capacity of the high-school pupil is the contention that the policy of election, founded, as it is, upon the doctrine of interest, will lead the pupil to avoid the performance of any task not particularly agreeable to himself. Now, no one questions the great desirability of training the student to habits of industry. Educational thinkers of every faith and order unite in the belief that all the functions of the school have ultimately but one purpose—to add to the number of the world's patient, continuous, effective workers; but the objection just now mentioned does not correctly represent the results of the application of the principle of election. The charge itself is open to criticism, for it is founded upon a misconception of the doctrine it attacks. The great value derived from the performance of a disagreeable task arises, not from the fact that the task is disagreeable, but because it is organically related with a desirable object. The adult whose life is one round of disagreeable acts, having no connection with agreeable results, is not living the life a human being ought to live, but is dragging out a miserable existence, from which all joy and hope are eliminated, and compared with which such slavery as existed in the southern states is a paradise. The truth is, that even the ascetic of old daily persecuted his body, not because he rejoiced in suffering *per se*, but because he gloried in ordering his life in such a way as he believed would eventually place his feet upon the spiritual mountain-tops, and give him visions of glory for which his soul had long been yearning.

Again, the etymology of the word "interest" (*inter* and *est*) discloses its educational significance. Any study becomes full of interest in the pedagogic sense when the student rightly considers it vitally connected with the process of his own self-realization. If this vital connection be not clearly perceived by him, or at least strongly believed by him to exist, the funda-

mental motive to strong and persistent effort is lost. Seeing no justification for the burdens laid upon him in prosecuting the study, he refuses to bear them altogether or he expends his energies in devising ways and means to bear as few of them as possible. The compulsory pursuit of any distasteful study thus leads the pupil to be satisfied with only partial scholastic success, and leaves with him no stimulus to prosecute that subject in its higher aspects. At the earliest opportunity he will not only refuse to press forward to complete mastery, but, in conformity with a well-known law of the mind, he will also proceed to divest himself as nearly as may be, of what little knowledge or discipline he may have suffered himself to acquire. This psychological principle is well expressed by Vergil, when he puts into the mouth of Æneas the words, "animus meminisse horret, luctuque refugit."¹

To what extent the adaptation of the curriculum to the individual student should be carried, is a problem to which many solutions may be offered; but the doctrine which this paper seeks to emphasize is that, no matter what answer be given to the question concerning the degree of election in the secondary school, some form of election, by the student, by his parents, by his teachers, or by them all acting conjointly, is indispensable if his own capacity and special talents are to be considered and developed.

The two fundamental doctrines which have been treated in this paper, constitute an indestructible foundation for the curriculum of the secondary school. Local conditions, and others not so local, now prevent the adequate application of these doctrines; but there is abundant evidence to justify the belief that the future has in store a day when the secondary school will discharge every reasonable obligation to the individual pupil and to the civilization of which his life is to be a component part. To help speed the coming of that day is the pleasure, as it is the duty, of every lover of learning and every lover of man.

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¹ VERGIL, *Æneid*, Bk. II., l. 12.

THE GAP BETWEEN THE SECONDARY AND THE ELEMENTARY SCHOOL.

ONE does not need to be recognized as a philosopher in order to observe that what is often boasted as being a continuous scheme of education from the kindergarten to the university has in it a serious crack, not to say an almost perilous break. There is something like a "jumping-off place" between the grammar school and the high school. This, we believe, is recognized and admitted by all school men and women.

The lamentations of the high-school teacher over the lack of preparation of the average grammar-school pupil are almost pitiful to hear. The wail of the grammar-school teacher that both she and her pupils are misunderstood by the specialist "above" is no less mournful. The teacher in the high school and the teacher in the grammar school are calling each other names and saying sarcastic things about each other. Meanwhile the pupil is the sufferer. An arbitrator, with plenary power to settle these disputes must come forward, else the welfare of the pupil will not be so sacredly guarded even as it is now. The probability is that the fault does not lie entirely with either the grammar school or the high school. And it is quite certain that whatever may be the flaw in the continuity of our system, or systems, it is historical; that is, it has developed, and made itself apparent, with the progress of educational thought and experience.

The writer of this paper is honestly endeavoring to state the case as he sees it, and as he knows many wiser than he have looked upon it for a long time. This is a problem that, like all other problems in education and elsewhere, has to be solved. Any person who has a contribution to make toward the solution of a problem in education is derelict in his duty if he fails to submit it to a competent tribunal. If it proves of no value other than to evoke criticism, the effort has not been made in vain.

The high school is taught by specialists. Each teacher there is supposed to know one thing better than she knows anything

else. She brings to her subject in the high school a rich fund of knowledge acquired only after years of severe study. The best high schools in the country, as a rule, admit no teacher to the corps, who, in addition to pursuing a regular college course, has not specialized at least one year in the subject she desires to teach. A university graduate without experience who has made a specialty of a certain subject, will be chosen to fill a vacancy in our high schools in preference to a normal graduate of many years' experience in teaching, even though it can be shown that the latter has been a student of the same subject throughout the entire period of her teaching career.

This policy of choosing instructors has worked incalculable harm to the high schools. There are some exceptions to this statement, but it is the rule, that the specialists in our high schools, while they have given a great amount of time to their subject, have given little or no attention to the study of education itself as a subject. Pedagogy and psychology are not a part of the training of the specialist in the high school. And yet if we understand at all the educational movement of our time as it is interpreted by students of the problem, pedagogy and psychology are two of the absolute essentials that the teacher in high school, grammar school, or university should know. We are fully aware that many college and university graduates regard these names as mere shibboleths of little minds. In fact, a professor in one of the oldest and greatest universities in this country said as much, in an article which was published in a leading educational periodical, less than one year ago.

It is admitted by everybody that a knowledge of a subject is not all that is necessary in order to teach it. Experience is usually considered one test of teaching ability. Yet our high schools choose for instructors year after year men and women whose sole recommendation is that they have won recognition as students in a certain subject. Many of these prove to be excellent teachers. Several do not.

There is nothing in the study *per se* of biology, or history, or mathematics calculated to develop the teaching power. Why should not the specialist be required to take a course in educa-

tion before he is allowed to take up the work of teaching? Is it entirely unessential that a teacher in the high school know something of psychology and its applications to pedagogy? Is a person qualified to teach our young men and women in the high schools who is ignorant of the important problem of adolescence?

The high-school teacher often is so engrossed with her subject that she is not sufficiently interested in the main subject before her, the pupil. Then, again, the specialist is so profoundly impressed with the importance of the subject she is teaching that she oftentimes loses sight of the fact that there are other specialists teaching their subjects in the same institution. As a consequence, the poor pupil is burdened with more work than a strong man can do even after he has become master of the difficult "art of study." Here lies one of the chief criticisms against the high school. The new pupil, when he enters the high school, is simply overwhelmed with the amount of work that he is called upon to do.

It may be said in reply by the high-school teacher, that owing to the elective courses now offered in most of our high schools the pupil does not have to select more work than his strength and time will enable him to do. It remains a fact, however, that if the pupil finishes the course in three and one-half or four years, he must select about so many subjects anyhow. The fault does not lie in the number of subjects that the high-school pupil must take. It lies with the instructors who discourage him at the outset of his career by assigning him more work than he can possibly prepare.

Again, as a rule, the high-school teacher does not regard teaching so important as does the grammar-school teacher. The specialist in the high school assigns a certain lesson and with little or no discussion, aside from what the author gives in the text, she expects the pupil to come to class next day prepared to recite. The pupil who comes from the grammar school becomes discouraged with this kind of treatment and quits. His teacher in the grammar school, when a new subject was taken up, called the attention of the class to its essential features before a lesson was assigned.

One more thing in which the high-school teacher fails is this: she does not become acquainted with her pupils. It is not altogether her fault that this condition exists. The manner in which the work in the high school is carried out from day to day and from hour to hour is in no small degree responsible for this. The pupil sees his instructor during a recitation and occasionally in the halls. But that close contact between pupil and teacher, without which much of our teaching is of little avail, is almost entirely wanting in our large city high schools.

Now, the grammar school has its faults and the grammar-school teacher has hers. There is no doubt that too much teaching is done in the grammar school—too much talking, too much assisting the pupil to do what he can as well do for himself, and better too. The pupil in the last year of the grammar school should be thrown more on his own resources than he has been in the other grades. He should learn the habit of independent study. He should be taught how to do things. Then he should understand that he must do these things without any assistance whatsoever from his teacher. The tendency of the grammar-school teacher is to make everything as easy as possible for the pupil. This is certainly a great mistake. The eighth-grade pupil has more capacity for independent work than the grammar-school teacher accredits to him.

The grammar-school teacher is not often a university graduate and she does not always have the respect that she should have for the accomplishments of the high-school specialist. She is not able to sympathize with the ardor and enthusiasm of the man or woman who has spent the best years of his or her life in working out the details of a single subject. Ripe scholarship is entitled to courteous respect. But it is well known that only those who possess the habits of the student can appreciate the attainments of the scholar. We believe it would be desirable to have grammar-school teachers who were scholars as well as teachers.

The city schools of today employ no teachers for the elementary schools who have not had the equivalent of a normal-school training in addition to being high-school graduates. It

too often occurs that the normal-school graduate thinks herself the equal in scholarship of the college or university graduate. This is a false conception. The normal school cannot furnish, nor does it pretend to furnish, in two years what the university requires four years to accomplish. But it gives to the teacher who wishes to take up the work of teaching in the elementary school what the university does not offer, only as elective—a training school and work in psychology and pedagogy.

It is a pity but it is sometimes true that the highly educated man is a snob. He is very much impressed with the important place that he occupies in the world because he is schooled and every one knows he is. Some such occupy positions in our secondary schools and the harm that they do is not possible to estimate. Education in a true sense should succeed in making its possessor modest, for the educated man is he who realizes how little he knows in comparison with what there is yet unlearned.

Making out of our high schools an intellectual aristocracy will not help to bridge the chasm that already exists between it and the grammar school. The introduction of college methods of teaching into our secondary schools may be just the thing, but the writer of this article and a few other persons as well, do not think so. Altogether too much is expected of our boys and girls when they go into the high school so far as the habit of study goes. The grammar school is blamed for not furnishing what human nature cannot possibly supply. The high-school specialists contend that the pupil who comes to the high school ought to be able to do the work outlined there. The student of psychology knows that no boy or girl ought to be required to do all that our high schools demand and do it in the way that the high school insists it must be done. The psychologist has studied the problem of the child, and until the high-school teacher gives this problem more thought and consideration, the present status of the case will be unchanged.

It may not be a solution of the problem, but we believe it would help to solve it, if grammar-school teachers who are efficient were promoted to the high school. There are college graduates who are glad to get positions in our grammar schools in

order to acquire experience. Is there any reason why such teachers should not be promoted to high-school positions? It would be a good thing if every high-school teacher were required to serve a term of years in the grammar schools before she is admitted to the high school.

If the continuity of our educational system is to be unbroken, in fact as well as in theory, this is one way to preserve it. The teacher who has taught in the grammar school knows a phase of the problem of education that the specialist never can know who enters the high school as instructor in a single subject. And if such a teacher is qualified from the point of view of scholarship to teach in the high school, what better thing can we do toward closing up the gap between the high school and the grammar school than to promote such a teacher?

If the problem that the education of the children of this country presents for solution is ever to be more nearly solved than at present, it will not be by having a superintendent and a few principals who are supposed to do all the thinking about the general problem and an army of instructors totally ignorant that there is any problem at all. Instructors should be employed who know their subject, and its relation to other subjects in the curriculum; who know that there is an elementary-school problem and a secondary-school problem, and that the solution of neither is independent of the other; who, in addition to erudition, possess the insight that enables one to understand and appreciate the difficulties that confront the beginner who sets out to explore the boundless domain of learning.

The National Educational Association which met at Minneapolis in July drafted a "Declaration of Principles." One of the statements made in that declaration is this: "We would plead for unity of effort for the complete education of the child constantly keeping in mind that the present division of the work of instruction into elementary, secondary and higher is for administrative purposes only. The character of the work is not to be influenced by any such division. The growth of the child through education into full manhood or womanhood is to be a continuous process, marred by no imaginary lines of division."

Every one knows that such terms as "elementary" and "secondary" should be for the purposes of administration only ; but we all know that in practice this is not the case. There is just as great a break between the last year of the high school and the Freshman year in college as between the eighth grade and the high school.

The university, itself, is, in no small degree, responsible for the failure of the plan that is supposed to be carried out in the elementary school, and the secondary school. It has dictated to the high schools what their courses of study shall be and the high school in turn has influenced the curricula of the grammar schools. This is all as it should not be.

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EDITORIAL NOTES.

GEORGE HERBERT LOCKE.

THE College Entrance Examination Board, established by the Association of the Middle States and Maryland, has now passed the experimental stage, and, in the marvelously short time of two years, has abundantly proved its right to be part of our national educational life. True, the first year was specially successful, more so than the most sanguine of the promoters imagined; but there were many of our too numerous educational wiseacres who warned us of "new brooms" and of too great ambitions. The pessimist has been completely worsted by the second annual report of the board which has just been issued. It is a record of triumphs. The number of candidates presenting themselves for examination has increased from 973 to 1,362. The number from New York last year was 616, this year it was 650; but the number outside the city last year was 357, while this year it had increased to 712, or an increase of almost 100 per cent.

Forty-one states were represented among the candidates. It is interesting to notice that Chicago ranks next to New York in the number sent up for examination. The increase in this city was over 100 per cent. and will likely increase still more next year when the merits and advantages of these examinations become better known. The questions were a little more difficult this year, but were fair, and represented pretty well what a graduate of a high school ought to know. These are published in book form, and sold for the board by Ginn & Co. No principal of a high school can afford to be without these guides.

It is of considerable interest to examine the ages of the candidates. The classification is as follows:

Age.	Number of Candidates.	Age.	Number of Candidates.
Fourteen years - - - -	14	Twenty-six years - - - -	5
Fifteen years - - - -	90	Twenty-seven years - - - -	2
Sixteen years - - - -	206	Twenty-eight years - - - -	4
Seventeen years - - - -	369	Twenty-nine years - - - -	1
Eighteen years - - - -	289	Thirty-one years - - - -	3
Nineteen years - - - -	221	Thirty-two years - - - -	1
Twenty years - - - -	56	Thirty-five - - - -	1
Twenty-one years - - - -	34	Forty-eight - - - -	1
Twenty-two years - - - -	13	Age not stated - - - -	35
Twenty-three years - - - -	12		
Twenty-four years - - - -	2		1,372
Twenty-five years - - - -	3		

It is encouraging to notice that those who were sixteen and seventeen years of age exceeded in number those of eighteen and nineteen, while a surprisingly gratifying number were only fifteen.

The total number of answer-books sent us by these 1,372 students was 12,251, of which 5,267 were read a second time, inasmuch as they had been rated below 60 per cent. The interests of the candidate are excellently safeguarded by this expedient.

But the most interesting table is that in which appears a detailed account of the results of the examination. This ought to be studied in connection with the examination papers.

There are some very interesting statistics in connection with certain subjects. In Latin the high percentage in *Cæsar* is remarkable. The highest rating was obtained by a larger percentage of students than in any other subject. Latin composition, elementary, and advanced, suffered severely. The examinations in these subjects were not very difficult, but composition in Latin is a neglected branch of our secondary education. Boys and girls are expected to attain proficiency in composition from a study of *Cæsar* or of *Cicero* with a little practice* in retranslating, or in working over short sentences which illustrate certain idioms. This was the popular doctrine some years ago in connection with the teaching of composition in English, but fortunately times have changed, and special attention is paid to rhetoric and composition; it is no longer merely a subsidiary part of education. The papers in advanced Latin composition this year were easier than those set at the entrance scholarship examinations to the English Public Schools. We have been paying too much attention to the literature and too little to the composition. The report in Greek tells the same tale, but it does not carry as great a lesson because of the less number of students.

The results in history are a little disappointing. In English and American history the percentage obtaining first or even second-class standing is extremely low—only 1.2 per cent. obtaining a rating of 90–100 in either subject, while 17.8 per cent. were in the class rated 0–40 per cent. in English history and 16.5 per cent. in the same class in American history.

A study of the results in mathematics shows us that elementary algebra suffered less than plane geometry; solid geometry claims its usual large share of victims.

The results in advanced French and advanced German help to confirm the opinion that these subjects are best pursued in the college. These examinations might well be omitted.

The following colleges are now represented on the board: Barnard, Bryn Mawr, Bucknell, Colgate, Columbia, Cornell, Johns Hopkins, Lehigh, Massachusetts Institute of Technology, Mount Holyoke, New York, Rutgers, Swarthmore, Syracuse, Union, University of Pennsylvania, Rochester, Vassar, Washington and Jefferson, Wellesley, Western University of Pennsylvania, Woman's College of Baltimore. These are active members. The certificate

	Number of Candidates.	Per Cent. Ratings 90-100.	Per Cent. Ratings 75-89.	Per Cent. Ratings 60-74.	Per Cent. Ratings 50-59.	Per Cent. Ratings 40-49.	Per Cent. Ratings 30-39.	Per Cent. Ratings 20-29.	Per Cent. Ratings 10-19.	Per Cent. Ratings 0-9.
ENGLISH.										
a. Reading	800	5.5	24.1	38.4	19.3	7.1	8.7	94.3	87.3	68.0
b. Study	704	5.4	24.2	35.0	17.6	9.4	91.5	82.2	64.6	64.6
	1,504	5.5	24.1	36.8	18.4	8.3	7.0	93.0	84.8	66.4
HISTORY.										
a. Ancient	52	11.5	19.2	50.0	5.8	11.5	1.9	98.1	86.5	80.7
i. Greek	146	3.4	28.1	44.5	10.9	6.3	6.9	33.1	86.9	76.0
ii. Roman	155	3.9	27.1	41.9	5.8	9.0	12.9	87.8	78.7	72.9
b. Medieval and Modern	16	...	50.0	37.5	...	6.3	6.3	93.7	87.5	87.5
c. English	253	1.2	8.7	37.6	18.2	16.6	17.8	82.2	65.7	47.5
d. American	339	1.2	14.5	34.2	18.3	15.3	16.5	83.5	68.2	49.9
	961	2.5	17.9	38.8	14.2	12.9	13.8	86.2	73.4	59.2
LATIN.										
a. i. Grammar	540	4.4	17.1	38.1	13.3	15.2	12.1	87.9	72.9	59.6
ii. Composition	534	3.0	7.9	29.9	13.7	19.7	25.8	74.2	54.5	40.8
b. Caesar	347	33.1	36.6	18.5	3.2	5.8	2.8	97.2	91.4	88.2
c. Cicero	477	10.5	26.4	28.9	7.6	10.1	16.6	83.4	73.4	65.8
d. Virgil, <i>Æneid</i> , I-VI	388	2.1	17.8	41.8	8.8	18.3	11.3	88.7	70.5	61.7
e. Nepos	39	2.6	10.3	30.8	3.6	25.6	28.3	71.7	46.3	43.7
f. Sallust	14	7.1	...	42.9	...	14.3	35.7	64.3	50.0	50.0
g. Ovid	26	...	30.0	20.0	5.0	10.0	35.0	65.0	55.0	50.0
h. Virgil, <i>Ecl.</i> and <i>Georg.</i>	4	...	50.0	...	25.0	...	25.0	75.0	...	...
i. Virgil, <i>Æneid</i> , VII-XII	4	...	...	...	...	75.0	25.0	75.0	...	...
j. Cicero, <i>Am.</i> and <i>Sen.</i>	2	...	50.0	...	...	...	50.0	50.0	50.0	50.0
k. Advanced Composition	291	1.4	4.8	27.1	8.6	23.1	35.1	64.9	41.9	33.3
l. Sight Translation	421	5.5	14.9	37.1	12.4	15.7	14.5	85.5	60.9	57.5
m. Sight Translation	3,081	7.9	17.7	32.0	9.9	15.4	17.0	83.0	67.5	57.6
GREEK.										
a. i. Grammar	190	1.6	10.0	12.1	14.2	18.9	43.2	56.8	37.9	23.7
ii. Composition	166	2.4	12.1	10.2	9.6	9.0	56.6	43.4	34.3	24.7
b. Xenophon	183	3.3	18.1	28.4	18.6	16.9	73.5	76.5	59.6	43.8
c. Homer, <i>Iliad</i> , I-III	135	1.5	20.8	37.8	18.5	9.6	11.9	88.1	78.6	60.1
d. Homer, <i>Iliad</i> , VI-VIII	13	15.4	23.1	30.8	15.4	7.7	7.7	92.3	84.7	69.3
e. Herodotus .....	...	...	...	...	...	...	...	...	...	...
f. Advanced Composition	99	...	9.1	11.1	8.1	16.1	55.6	44.4	28.3	20.2
g. Sight Translation	134	1.5	9.0	17.7	8.2	12.7	58.9	41.1	28.4	20.2
	920	2.1	12.3	18.6	12.8	14.1	40.2	59.8	45.8	32.0
FRENCH.										
a. Elementary	509	2.8	20.2	29.5	14.5	12.0	21.1	78.9	67.0	59.5
b. Intermediate	226	9	16.4	31.9	17.3	15.1	18.6	81.4	66.5	49.2
c. Advanced	38	...	2.6	13.2	7.9	15.8	60.5	39.5	23.7	15.8
	773	2.1	18.2	29.4	15.1	13.1	22.3	77.7	64.8	49.7
GERMAN.										
a. Elementary	493	2.2	21.7	29.0	12.6	12.4	22.1	77.9	65.5	52.9
b. Intermediate	191	4.7	19.9	30.9	12.6	16.6	19.4	80.6	68.1	55.5
c. Advanced	56	1.8	5.4	25.0	10.8	10.8	46.4	53.6	43.0	32.2
	740	2.8	20.0	29.2	12.4	12.3	23.2	76.8	64.4	52.0
SPANISH.										
	9	...	44.4	11.1	...	11.1	33.3	66.7	55.6	55.6
MATHEMATICS.										
a. Elementary	810	22.2	22.5	25.7	10.5	8.4	10.7	89.3	80.9	70.4
i. To Quadratics	638	8.5	10.2	34.5	6.4	11.8	28.7	71.3	59.6	53.2
ii. Quadratics, etc.	355	11.0	11.0	22.5	5.1	6.8	43.7	56.3	49.6	44.5
b. Advanced Algebra	71	2.8	5.6	21.1	11.3	14.1	45.1	54.9	40.8	29.5
i. Series	50	...	4.0	20.0	6.0	8.0	62.0	38.0	30.0	24.0
ii. Theory of Equations	782	5.1	14.7	37.9	12.7	12.4	17.3	82.7	70.4	57.7
c. Plane Geometry	249	3.2	6.4	28.9	12.9	15.3	33.3	66.7	51.4	38.5
d. Solid Geometry	207	11.6	17.4	27.5	11.1	14.1	18.4	81.6	67.5	56.5
e. Trigonometry	32	6.3	6.3	25.0	6.3	18.7	37.5	62.5	43.9	37.6
i. Plane	3,194	10.9	14.5	30.3	9.8	11.0	23.7	76.3	65.5	55.7
ii. Spherical	222	4.1	21.6	34.7	23.9	10.8	4.9	95.1	84.3	60.4
PHYSICS	193	10.4	29.5	31.6	14.5	8.3	5.7	94.3	86.0	71.5
CHEMISTRY	5	20.0	...	40.0	40.0	...	...	100.0	100.0	60.0
BOTANY	5	...	20.0	20.0	...	...	60.0	40.0	40.0	40.0
GEOGRAPHY	136	6.6	22.8	43.4	7.4	8.1	11.8	88.2	80.2	72.8
DRAWING	11,744	6.7	17.8	31.4	12.4	12.4	19.4	80.6	68.3	55.9

of this board is received and given credit by almost every college in this country, and the principals of many of our secondary schools are using these examinations as a test of graduation. They furnish a standard of judgment wholly removed from any local influence, and these results, combined with the value placed upon the daily work of the pupil, ought to make a satisfactory "leaving examination."

An interesting feature of the work of the board is that it has no "passing mark." It acts as an independent appraiser, fixes the value after a careful examination, and communicates the value to the candidate who presents the certificate at his college port of entry. The board has nothing to do with the standards fixed by the college concerned. This is a very strong point in favor of the system, and as the appraising is done by representatives of the secondary schools as well as of the colleges, the candidates and the general educational public cannot but have full confidence in the certificate issued.

The great success of this movement is due particularly to President Nicholas Murray Butler, of Columbia, to whose skill in organization, to whose enthusiasm in advocacy, and to whose clear discernment of the needs of unification in our higher education, we owe so much. The smoothness with which the comparatively new machinery ran this year proves that the secretary, Dr. Thomas S. Fiske, has studied well the great problem and provided for the many emergencies that always arise in connection with such a large and complicated project.

THE regular autumn meeting was held at Peoria on the 10th and 11th of October, and was one of the most profitable in the history of the club. On

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the evening of Friday, Professor H. P. Judson, of the University of Chicago, gave an address on "Civics." It was a straight, common sense, practical talk upon the place that this subject ought to have in the school life of boys and

girls so that they may recognize that intelligent participation in the affairs of government is not only a privilege but a duty and a responsibility that must not be shirked. Especially convincing was his point that too much time was now spent upon the study of the details of our federal and state system, and too little upon the important aspects of municipal government. The elevation of municipal ideals is dependent upon the interest and intelligence displayed in our schools in thinking upon the things that are wise and honest and of good report. It is not so much the wickedness of the bad that we must guard against as the apathy of the so-called good. In the discussion that followed the address it was very apparent that the mastering of the content of the text-book was in this, as in other subjects, the too general practice.

On Saturday, Mr. J. S. Brown, principal of the Township High School of Joliet, read a paper on "The Extension of High-School Privileges in a Community." This fairly bristled with suggestions and provoked a very animated discussion. He recommended that an evening school should be established in

connection with the high school, and gave interesting facts in connection with such a scheme; that the high school should admit students of eighteen years and upward who had not and could not pass the examination for entrance, but who desired to add to their meager education. The number of these would not be large and the proof of their *desire* must be shown by the *work* done during the first few months. The standard for judgment is progress, and the force of Mr. Brown's illustrations of what had been done at Joliet, was greatly strengthened by Superintendent Stableton, of Bloomington, who told of boys working in the stores of that city who attended the high school for one or two hours a day, and whose attendance was full of meaning and help to them and did not disturb "the established order of things" so ardently worshiped by some school men. Principal Thomson, of the Galesburg High School, gave additional strength by illustrations of what had been done in that city, not only for those in the city itself, but for many in the surrounding rural districts whose advantages had been meager, but whose ambition led them to desire something that would enable them to rise. This desire to rise is the heritage of every girl and boy in this country; our literature is full of the lives of men who from the humblest positions in life have risen to the command of the various divisions of our national life. It is only a short time since, at a dinner of great and wealthy men in New York City, it was proposed that as a last toast of the evening some one offer: "The Boy from the Farm." Nobody could be found to act inasmuch as such was the beginning of all present.

The various correspondence study institutions of this country have sprung into being — and into such wide-spread and wealthy being — to satisfy this desire. The education given in many of these is poor, lamentably poor; in many cases it is a get-learning-quick scheme, a veneer that will not last when exposed to the rude elements. The public high school, supported by public funds ought to be so organized as to hours, material equipment, and course of study, as to meet the wants of many of these ambitious but meagerly prepared persons who have to labor during part of the day. In many of our cities and towns there are large high schools representing an investment of upwards of \$50,000, and which annually cost a large sum for maintenance. Many of these schools are in session only five hours a day. Is this a paying investment? Five hours a day for manufacturing establishments would be laughed at by the practical man, but we seem afraid to introduce business ideas into school work lest we be thought sordid and material. The church and the school have been the two prominent institutions of our social life which have not been influenced by business progress and into the management of which we have hesitated to introduce business methods. The sacredness of neither would suffer and the usefulness of both would be increased by such a connection.

Again, the idea of too many teachers is that school is a place where recitations are to be held, where the teacher is to find out if John Smith has acquired

the amount of information that was assigned him on the previous day. It is thought by some that the *method* by which the information is to be acquired is of little or no importance. Very likely the teacher has no method himself and so believes in none. The question with him is one of fact. It has not occurred to him that the function of the teacher is to show the pupil *how* to get information, how to attack problems, how to organize knowledge so that it may be useful, how to estimate the comparative value of things in accordance with a higher ethical and intellectual standard—in fine to help him to a training in choice.

The opportunities for aiding self development, for giving these ambitious girls and boys now nearing the ages of maturity ought to be furnished by the public high school. Such aid through the correspondence-study agencies lacks the very essential of successful teaching and successful learning—the influence of life on life, the presence of the interested and therefore interesting teacher.

BOOK REVIEWS

Nature Study and Life. By CLIFTON F. HODGE, Assistant Professor in Clark University. Boston: Ginn & Co. Pp. xv + 514.

It is generally recognized that the modern spirit in the biological sciences has been slow in becoming established in the grade work of secondary schools. It is quite natural and proper that the lower part of our educational system should respond to new points of view in any field of knowledge less readily than should universities and colleges. This is true partially because we have in the grades a more unwieldy number of learners, and further because those in charge are in less direct contact with the development of the various subjects than are those who teach in universities or even in high schools. Most of the publications designed to put these subjects before the boys and girls have been inefficient. This fact, while due in different cases to various combinations of causes, is doubtless due largely to inaccuracy of statement, to lack of knowledge of the relative advancement and needs of the pupils, and to a failure to present the material so that it will be sensible and interesting. This book by Mr. Hodge is a most excellent attempt to correct these educational evils, and its good influence will be large.

The book is written for the teacher, and presupposes intelligence and interest sufficient to enable her to adapt the work to her pupils. The first and second chapters on "The Point of View," and "Values of Nature Study," respectively, set forth the principles which organize the material. The purpose of nature study is rather ambiguously stated as "Learning those things in nature that are best worth knowing to the end of doing those things that make life most worth living." Since in the early history of the race attention was necessarily directed toward economic aspects of plant and animal life, it is argued that science work with the children should take the same point of view. Consequently there is found abundant suggestion as to the economic significance of the various topics considered. Endless opportunities for interesting work with insects are presented in a half dozen chapters given entirely to that subject. Many of those which are house pests are discussed, and helpful suggestions are made as to their removal and prevention. It may properly be questioned whether it is of great advantage to the children to make the extensive collections of insects as planned. Although a study of museum specimens illustrating the life cycle is beneficial, most of such work should be done with living insects.

A feature of the book especially to be commended is that which relates to children's gardens. This phase of school work, hitherto little noticed in this country, seems destined to become an organic part of our system, and the suggestions here made will certainly stimulate such work in many schools. For acquisition of knowledge of soils and how plants grow, for development of industry, a feeling of ownership and an appreciation of agriculture, and for manual-training benefits the school garden should prove an efficient factor. It is possible to have such a garden without serious loss of time from other school work. Other topics considered are those such as birds, frogs, and forestry. Two chapters are given to the study of "Flowering

Plants," and the closing chapter consists of an outline of topics suggested for study in each of the nine grades.

It may be said that the book differs from others in the same field in the method of treatment rather than in the subjects considered. Abundant facts are presented, more indeed than any teacher can use with her class, but the sensible presentation advocated and the pleasing absence of those frivolous things which are found in almost all of our nature study books, are the especial points which will bring this book into a wide field of usefulness. With its excellence in this regard it is peculiarly unfortunate that the author should include "legends and myths" as a part of his nature study course. Not infrequently the mythical stories which have been told about nature have made it very difficult indeed to present satisfactorily those things which are true and really more wonderful and interesting than are the myths. "The wonderland of childhood must henceforth be sought within the domains of truth. The strange facts of natural history, and the sweet mysteries of flowers and forests, and hills and waters, will profitably take the place of the fairy lore of the past." (J. G. Whittier.) The text-matter of *Nature Study and Life* is a good embodiment of the idea in the quotation, and the reviewer cannot see why legends and myths are included in the grade plans. This feature, however, is not conspicuous, and it is to be hoped will be made less so by the large number of teachers who will use the book. Together with Mr. D. Lange's *Nature Study*, which has been so efficient, this book by Mr. Hodge should bring us rapidly from that which has been passing under the name of nature study into a real study of those accessible things in elementary science which will develop the boys and girls, giving them an abiding interest in such work, and leave them with a store of useful knowledge.

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SOME ANCIENT HISTORIES.

Ancient History to the Death of Charlemagne. By WILLIS MASON WEST, Professor of History in the University of Minnesota. Boston: Allyn & Bacon, 1902. Pp. xxxvii + 564.

A History of the Orient and Greece—for High Schools and Academies. By GEORGE WILLIS BOTSFORD. New York: The Macmillan Co., 1901. Pp. lxx + 383.

A History of Greece from the Earliest Times to the Death of Alexander the Great. By C. W. C. OMAN, Seventh edition: Revised. New York: Longmans, Green & Co., 1901. Pp. xiii + 560.

Outlines of Roman History—for the use of High Schools and Academies. By WILLIAM C. MOREY, Ph.D. New York: American Book Company. Pp. 348.

History of the Roman People. By CHARLES SEIGNOBOS. Translation edited by William Fairley, Ph.D. New York: Henry, Holt & Co., 1902. Pp. x + 526.

WEST's *Ancient History* is, to our knowledge, the first book which attempts to meet the demands of the now famous "Report of the Committee of Seven" in covering the

great field from the beginnings of history to the reign of Charlemagne. Many features of the book are admirable. The author has an eye for the grouping of his material. His "Analytical Table of Contents" occupying nearly thirty pages, should be a veritable treasure-house to most teachers, not to say, pupils. It is the best outline of the subject to be found anywhere. Of course all parts of it are not equally well done, it is, perhaps, weakest in the oriental section where the historical development should be handled as a whole, not broken up into histories of the several countries. The treatment of the subject follows this outline rigidly and discloses the fundamental defect of the book—its complexity. The analysis is too complete to be followed easily from page to page of the text. Add to this the author's studied emphasis on the inner side of the history and its minimizing of outward events, of wars and of personal details—and you have a book which only a most skilful and well-read teacher can use successfully. The style, too, is not simple, and will make the book hard reading for the class of pupils for which it is intended. These objections do not make against the solid worth of the author's work, but only against the availability of it as a textbook. No one can read it without being instructed, or without recognizing that it has been written by one who has made thorough studies and has a sense of order and form. The maps and plans, the aids to teachers and helps to the pupil are excellent.

To his popular and excellent *History of Greece* Botsford has prefixed some account of the oriental peoples, and thus made his *A History of the Orient and Greece*. The oriental part, which especially calls for notice, must frankly be called very unsatisfactory. Not only does it take up the different peoples separately—which no modern historian of antiquity should think of doing—but in general statements and presentation of details it is often quite inaccurate. In this matter of inaccuracy, indeed, West is not far behind him. If specialists in classical history must write on the Ancient Orient they should submit their work to specialists in the latter field, if they are not willing to take the time to master it themselves.

Oman's *Greece* appears in a seventh edition revised. The number of pages remain the same. The changes consist in a revision of the second chapter, which is now entitled "Aegean Civilization," and of the narratives of certain battles of the fifth century. A number of illustrations of coins and sculptures are inserted as head- and tail- pieces in connection with the several chapters. The same small type is employed. The book is likely in the new form to have a new lease of life. While a little advanced for the most of the pupils who take Greek history in our schools, its clearness, fullness, soberness and accuracy will continue to commend it to many teachers. It stands halfway between Botsford and Bury.

Two new histories of Rome are offered for use in schools. Morey's *Outlines* has already been tried in many schools with much success. It is brief, simple, well-proportioned and accurate. It strikes us a little strangely that Seignobos' *History of Rome* should be thought useful in American schools. It is a narrative history, distinctly interesting, intended primarily to tell the story of Rome's progress, not disdaining even the legends and the personal anecdotes. The trend in our schools seems all the other way. Our teachers are more interested in institutions. But, no doubt, it is worth while to have the former method and ideal kept in view as is done by this book in the lucid and engaging fashion characteristic of the French historians. Professor Fairley has done his work of translation admirably, and has supplemented the original work by chapters which carry the narrative down to Charlemagne.

G. S. GOODSPEED.

THE UNIVERSITY OF CHICAGO.

An Elementary Experimental Chemistry. By JOHN BERNARD EKELEY. New York: Silver, Burdett & Co.

THIS book is divided into three parts. Part I consists of experiments illustrating the general methods of preparation and the properties of the common metallic and nonmetallic elements and their compounds. The experiments are clearly stated and sufficiently detailed. The order of arrangement offers some advantages over the usual one, but may have a tendency to dissipate rather than concentrate the mind on the subject at hand. Some of the experiments might better be reserved for the lecture-room, especially when large classes are to be handled.

The experiments in Part II illustrate the laws and theories of chemistry. The number given is unusually large, and some of them require too much time and skill and too complex apparatus to be serviceable in a large majority of the schools even of the better college class.

Part III is a description of the elements and compounds studied in the former sections, and contains an outline of qualitative analysis.

The book, as a whole, contains much valuable material, though not new, but there is danger that it cannot be used in high schools, nor in colleges except where apparatus in large quantities and of somewhat an unusual kind can be secured. Some of the conclusions are unwarranted, some statements of fact wrong and some of the English quite misleading. There is a question whether the general plan of the book is the best. But by better digestion and adaptation it may become a valuable text.

JAS. H. RANSOM.

PURDUE UNIVERSITY.

Physical Experiments. A Laboratory Manual. By JOHN F. WOODHULL and R. D. VAN ARSDALE. New York: D. Appleton & Co., 1900.

THIS book consists of a rather sketchy outline of some of the simplest and commonest experiments in Physics. The book might be useful to suggest experiments to a teacher of Elementary Physics, but could hardly be used as a Laboratory Manual, because the experiments are too largely qualitative.

H. G. GALE.

THE UNIVERSITY OF CHICAGO.

Exercises in Natural Philosophy. By MAGNUS MACLEAN. London: Longmans, Green & Co., 1900.

THIS book contains over seven hundred well selected problems, including both questions on theory and numerical examples, of grade corresponding to a first college course. Some of the most important formulæ are derived and hints for solution accompany most of the examples. To a teacher lacking sufficient originality to formulate his own questions the book would be very useful.

H. G. GALE.

THE UNIVERSITY OF CHICAGO.

SOME RECENT SPANISH TEXTS.

ALARCÓN'S *El Capitán Veneno*. Edited, with vocabulary and notes, by G. G. BROWNELL. American Book Company, pp. 143 (93 of text.)

THIS story of a confirmed woman hater and of his subsequent discomfiture at his own game, is one of the most entertaining and best known of the author's work. It

abounds in humorous touches, and the portraiture of its characters is strong and sympathetic, appealing throughout to the reader's interest. The story possesses the necessary qualifications for becoming a desirable school and college text for first year students, having the further great advantage—so seldom realizable in language texts of the better class—that the story is short enough to be presented in its entirety without undergoing mutilation or other impairment at the hands of an editor, aside from that which too often results, in other respects, from the process of editorship.

While possessing the needed qualifications for appearing creditably in a series of language publications for school and college use *El Capitán Veneno* has some drawbacks which can be overcome only by careful editorial workmanship. In the first place, the book is a difficult one for early first year reading. Properly, it should be taken up at that stage of the course when the learner has so far progressed as to be able to dispense with the need of special vocabularies and can rely upon a general dictionary, which for his purpose will afford better training. But the publishers have evidently thought otherwise by equipping the book with a special vocabulary with the aim, presumably, of fitting it for early use. We are of the opinion that the preparation of special vocabularies for language texts is inadvisable for any but distinctly elementary work, where the presence of the limited lexicography needed is an aid to intelligent study and a saving of time. But outside of this category special vocabularies are rather objectionable than otherwise; and in the case of difficult texts they are a distinct disadvantage, inasmuch as they take up space which might be much more profitably applied to the greater development of helpful explanatory notes.

The present text is of a nature calling for editorial work of the most thorough and careful kind. It abounds in idioms, and its abundant dialogue is of more than average difficulty. The learner's task—and incidentally the teacher's—would have been lightened had the vocabulary been dispensed with and its place taken by a fuller gloss of idiomatic turns and phrases. In some cases these explanations are insufficient or misleading, in others they are lacking. To cite some examples: the editor gives no explanation of *no poder menos de* (p. 29, l. 21), although it might have been included in the vocabulary. True, the student may infer its meaning without special reference being needed, but completeness of arrangement would have taken account of it somewhere. The same remark applies to *á mis tres Marias* (p. 34, l. 12). No adequate explanation is given to *libros de caballería* (p. 38, l. 2), *echar su cuarto á espadas* (p. 37, l. 20), *á cusar las cuarenta* (p. 48, l. 26), *cuidado si tiene hígados* (p. 49, l. 11), *la de Dios es Cristo* (p. 72, l. 2), *reo en capilla* (p. 72, l. 21). For this last the editor gives us in the vocabulary merely "a sentenced criminal" a meaning doubtless sufficient for its place; but a footnote might have made clear to the reader the full significance of this picturesque expression, so characteristic of Spanish feeling and custom. *Don Rodrigo en la horca* (p. 80, l. 34) is ignored. The meaning of *dicho se está* (p. 66, l. 20) cannot be readily construed by the beginner from the only vocabulary help bearing upon the subject, *estarse*—"to be detained, to stay." The meaning given by the editor to the homely popular phrase *esas calles de Dios* (p. 13, l. 28), "any of the streets, all of the streets" quite fails to suggest the fine flavor of the original. This is hard to transmit by any attempt in constructing an equivalent, but an explanation might have directed attention to the desired idea. The same criticism in respect to the editor's frequent tendency to put forward very free or misleading equivalents might be applied to his version of *dale que dale* (p. 81, l. 20), "keep on, hang it." Rather the meaning is "there you're at it again."

It seems a pity that publishers should not be more circumspect in duplicating excellent editions of the same work already in existence, unless the new form clearly has some additional advantage justifying the time and expense put upon it. A more rational policy in this respect would effect a great saving in many directions. The present edition of *El Capitán Veneno* is inferior to a preceding one which has latterly been published, and its appearance cannot, therefore, be said to fulfil any truly useful purpose. The editor's object seems to have been to reduce information to the briefest limits, a policy which in the present instance has involved many sacrifices in efficiency. For if a book is to discharge its mission worthily it should not leave to the devices of the busy—and peradventure ill-equipped—teacher that which properly comes within its own province.

VALERA'S *El Pájaro Verde*. Edited by G. G. BROWNELL. Cloth, 12mo. 28 pages of text, with notes and vocabulary. Price 45 cents. Ginn & Co.

THIS is a popular and pleasing fairy tale of a leading Spanish author, a text well adapted for early reading. The language is easy, the style simple, and the idioms not so numerous or unusual as to be disconcerting to the beginner. The present edition is a practicable one, with vocabulary and notes. The latter are sparing in quantity and quality, although perhaps all that the nature of the text absolutely calls for. Idioms receive, as a rule, free translation without explanation. We think this course a disadvantage, although there are some teachers who might deem such explanations wasted on beginners, or would leave them to the ingenuity of the teacher, who, presumably is competent to fill in the gaps. Unfortunately this last desideratum is not always attainable in a system of school assignments so frequently met with where teachers are often forced to make the most irrational or fantastical combinations of subjects committed to their charge.

A body of composition exercises is appended to the text, made up of twenty groups of English sentences paraphrased from Spanish originals scattered throughout the text. The usefulness of these exercises would have been greatly heightened had the choice of a given group been circumscribed to certain definitely stated pages or passages. As it is, the pupil is obliged to glean over a wide field in the hopes of picking up, here and there, the kernels he is looking for. Carried to excess the process is apt to be discouraging instead of having, as it should have, stimulating results.

The edition is in striking contrast to current usage in that the text is not preceded by a learned and erudite biographical-critical treatise on the author and his works. Such a treatise would be hardly in keeping with the literary proprieties to be observed toward a short fairy story. But we think that a few lines of information about the author and his work would have been welcome to both teacher and student. Even this is lacking.

LESAGE'S *Historia de Gil Blas de Santillana* (Padre Isla's version). Edited with notes and vocabulary by GEDDES and JOSSELYN. D. C. Heath & Co., pp. 244 (165 of text).

WE are glad to note the appearance of this celebrated work in a form convenient for school and college use. For the fact that the *Historia de Gil Blas* purports to be a Spanish translation from the French original of Lesage matters little in the practical estimate of Padre Isla's work. The subject-matter of Lesage's novel is far more

Spanish than French: rather, it is exclusively the former; and it needed only a well fitting Spanish dress to make it take independent rank at once among the best original Spanish works known. In their preface the editors do well in reminding the reader, that despite the existence of numerous original Spanish texts none has had quite the success of the Padre Isla's celebrated version of Gil Blas. To an eminent degree it possesses the needed qualities of human interest in the theme, of clearness and directness in the narrative, of simplicity in style, to become an excellent text for middle or latter first-year reading. And above all it has the wit that keeps it sweet.

In spite of these superior advantages it is not easy to make up from the lengthy original a perfectly satisfactory edition within the brief limits of a hundred and fifty pages, more or less. In the original the narrative is very discursive, having numerous episodes that may very profitably be abridged, and digressions that may be discarded. Yet even with this gain in compactness and unity brought about by liberal and judicious excision the remaining matter selected requires skilful treatment in order that the surgical work may not result in obvious and painful mutilation. The editors may have done as well as could be expected under the circumstances. Yet we venture to think that in certain cases the amputation might have been better managed, or, at least, disguised by some device for connecting smoothly the broken ends so as to improve the articulation. If the editors had introduced brief explanatory passages, in Spanish or English, to connect the broken links, the clearness of the narrative for the inexperienced reader, unacquainted with the original, would have improved. For example, Book I is presented in our edition tolerably intact as far as the fourteenth chapter, where the hero is brought back to his supposed benefactress, Doña Mencia, after his release from the Astorga prison. At this point he begins a variety of experiences covering the five chapters of the rest of Book I, at the close of which he enters upon his interesting service with the *licenciado* Cedillo, who later succumbed to the malpractice of Doctor Sangrado. But in the abridged text no attempt is made to connect the two points, and the break between the last recorded chapter of Book I and the first of Book II is disconcertingly abrupt. At the beginning of Book II, chap. iii (p. 71), a note could have enlightened the reader as to the identity of the Señor Arias de Londoña. We are here first introduced to him, although in the terms of the text we are led to infer that we should already be acquainted with him. As a matter of fact his first appearance in the original is in the last omitted chapter of Book I where he has an intelligence office at which Gil Blas applies for service. A more bewildering example is p. 86, where the original text, set without commentary before the reader, leads the latter to infer in a vague, unsatisfactory way, that the hero has had a *mauvais quart d'heure* with an adventuress, Camila, and her ruffian confederate, Rafael. As the chapters relating this affair have been cut out, a brief explanatory note might have set this uncertainty to rights. The reader is already prepared to jump many gaps, but he would prefer not doing so blindfolded. Other examples of such nebulous stages in the career of Gil Blas might be cited, notably p. 118, between chap. iii of Book III and chap. iii of Book VII, at which point the narrative is resumed.

In fact, we presume that the editors deliberately discarded any idea of making a *liaison* between the different chapters introduced, barring a single exception (p. 139), contenting themselves with giving us a series of brilliant pictures relating to some of the best known episodes in the hero's chequered career, such as the experiences with the robbers and their subterranean retreat, with Sangrado, the *licenciado* Cedillo, the Arch-

bishop of Granada, the duke of Lerma. But we feel that such a course, uncorrected, constitutes a blemish of no small degree in the book. Some may contend that it is inevitable in a book with a body of selections so very brief, in proportion to the original, that the resulting fabric has hardly woof and warp enough to hold it together well.

A few discrepancies in the vocabulary are noted, e. g., p. 10, I. 13, a note is given to *tal* in the expression *el tal caballero*, but it first occurs on p. 7, I. 29; as *el tal mesonero*. On p. 19, I. 28, the expression *es á saber* does not have its meaning "namely" or "to wit" registered in the vocabulary, nor *quiere decir* (p. 77, I. 31) under either verb, nor *hombres de bien* (p. 55, I. 10). On p. 118 *con motivo de* would have justified a note, the vocabulary definition of *motivo* as "motive, accord" not covering the case, which is here, rather, "because, for the reason of." On p. 110, in the expression *por poco sospechoso*, etc., the sense of *por poco* might have been included in the vocabulary with *por más*. On p. 88, I. 31 a note to *si lo lleva á bien* would relieve some uncertainty. It is not clear why, in the vocabulary, *curandero* should be taken out of its proper alphabetical order and be made to follow *cuchillo* and precede *cuello*. Doubtless the list might be considerably increased.

The notes are perhaps all that are absolutely indispensable. But in a book designed, presumably, for those in the early stages of the language it might have effected some saving of time and some avoidance of uncertainty to inform the learner of the character of such idioms like (p. 40, I. 26) *te levanto la tapa de los sesos*, "I will blow your brains out;" or, (p. 41, I. 25) *me sacó fuera de mí*, "drove me wild, to distraction;" or, (p. 121, I. 24) *era de ver*, "it was worth seeing;" or, (p. 141, I. 1) *calzarse* (or, *ponerse*) *las botas* (= *enriquecerse, lograr extraordinario provecho*).

But these defects do not seriously mar the merits of the book, which are many. The introduction is good, the notes are generally satisfactory as far as they go, the vocabulary sufficient—upon the whole; and the body of the text has been well selected.

Spanish Anthology. Edited by J. D. M. Ford, pp. 390 (333 of text), with introduction, glossary, and notes. Silver, Burdett & Co.

THIS is a scholarly work that cannot easily be improved upon for those courses having the leisure and taste for taking a comprehensive view of the field of Spanish verse. The book will warmly commend itself to the sympathies of the relatively small constituency—chiefly advanced university courses—of those who have acquired a good foundation and can afford to yield themselves to special select fields of literary study. With the average school and college course, cramped by limited time and crowded curriculum, the volume in question will not enter conspicuously into the scheme of work. For, contrary to the expressed opinion of some teachers, we hold that verse can profitably be introduced into the reading matter of a foreign language in moderate doses only, if any at all, when the class standing is at any but advanced stages. The beginner in a new language may not find poetry absolutely unprofitable, but the time could be much more profitably employed otherwise. As the most polished specimens of versification are apt to be an expression of a high degree of civilization, which has prepared the way for it, so we think that the wanderer in a strange idiom is little qualified to form a judgment of its poetic beauties until he has established some claims to the *droit de bourgeoisie* by having gotten well past the point of struggling with its initial linguistic difficulties. For until this point is reached his

appreciation of verse will suggest the position of the average Latin student who has laboriously reconstructed Caesar's bridge across the Rhine, piece by piece, without the aid of diagram or illustration, remaining quite unconscious of the appearance of the completed structure.

Doubtless the editor does not contemplate that his book shall be used by immature students. His collection is the first practicable one in the field, and the volume is deserving of the highest praise. The subject is well proportioned and the matter well selected, beginning with the first appearance of constituted Castilian verse in the thirteenth century, and continuing with some of the most notable and memorable specimens down to the present time. The selections are divided into four groups, representing 156 authors and 18 anonymous poems. Of this number the first group (60 pages) belongs to the thirteenth-fifteenth centuries, the second (125 pages) to the sixteenth-seventeenth centuries, the third (43 pages) to the eighteenth century, and the fourth (98 pages) to the nineteenth century.

We should naturally expect the largest proportion to be devoted to the second group, since it deals with the rich lyrical output of the sixteenth century and the bountiful poetic harvest of the *siglo de oro* in the following century; and we should expect the smallest assignment to the decadent age following the latter. This proportion the editor very judiciously observes. Space forbids us to examine the merits of the individual selections. Respecting some of these individual tastes will vary, but we feel that Professor Ford's critical judgment and literary discernment in his work have been remarkably good.

A valuable feature of the book is the scholarly introduction (pp. xv-xlvii), giving a brief sketch of the general movement of lyric production in Spain. This is followed by some "Notes on Spanish Prosody," in which the editor presents a synopsis of the leading factors of Spanish verse, such as syllabication and meter, the latter subdivided into Pauses, Accents and Rythm, and Rhyme. The treatment under the second head (Accents and Rythm), of the different kinds of verse is particularly to be commended for the clearness with which this complicated feature of Spanish prosody is brought out. We are surprised that no formal statement is made—at least we did not notice it—of the three kinds of verse accent terminating a line, the *verso agudo*, *llano*, and *esdrújulo*. It is true that the *esdrújulos* are very rare, and the tendency is to avoid them. But the *llanos* are the regular lines, although the fact is not made clear in the book—neither the fact that this subject is important for the proper treatment of verse, particularly in the study of Old Spanish verse. The first one of the terms (*agudos*) and the third (*esdrújulos*) are mentioned (e. g., p. xxxviii and xli), but incidentally, as though the reader already understood them by inference from the context. On p. xxxv, l. 1-2, we meet the direction, after hendecasyllable, "see below," the only connection of which with what follows seems to be on p. xxxviii, last paragraph. The editor has packed so much matter in so small a space that the presentation of the subject suffers at times from congestion. Yet in spite of this drawback the "notes" form the best summary, within easy reach of the student, of the salient features of Spanish prosody.

The body of the text is followed by some fifty pages of glossary and explanatory notes, the latter including brief biographical sketches of the authors as their work is introduced.

R. E. BASSETT.

THE UNIVERSITY OF MISSOURI.

BOOKS RECEIVED.

[The notice here given does not preclude the publishing of a comprehensive review of any of these books.]

Elements of English Composition. By John Hays Gardiner, George Lyman Kittredge, Sarah Louise Arnold. Size 5×7 . Pp. 432. Price \$1. Boston: Ginn & Co.

This is an interesting collaboration of authors. Kittredge and Arnold's Books I and II were new in form and in style, and provoked criticism and imitation. The addition of Mr. Gardiner, for the purpose of this work along composition lines, was wise. We hope to publish a comprehensive review shortly.

Composition and Rhetoric for Higher Schools. By Sara E. H. Lockwood and Mary Alice Emerson. Size 5×7 . Pp. 470. Price —. Boston: Ginn & Co.

The authors state the characteristics of this book to be "the cumulative method of treatment shown in the text, in the illustrative examples, and especially in the exercises; and the constant emphasis on the pupil's own thinking and writing."

Lessons in English, based upon Principles of Literary Interpretation. By W. H. Skinner and Celia M. Burgert. Size 5×7 . Pp. 150. Price 50 cents. New York: Silver Burdett & Co.

This book is intended to put into elementary application the principles of literary study that have been used in the University of Nebraska, and its paramount object is the education of the feelings; of taste before intellect, instead of intellect before taste.

Scott's Lady of the Lake. Edited by Edwin Ginn. Size 5×7 . Pp. 219. Price —. Boston: Ginn & Co.

The preface to this book is worth reading—there are some ideas in it; the extracts to illustrate the life and times of Scott are of literary and historical value, and are not too long; the notes appended to each page are good, but one cannot but question the value of notes which are other than historical explanations. This, however, is one of the least sinners in this respect.

Selections from De Quincey. Edited, with introduction and notes, by Milton Haight Turk, Hobart College. Size 5×7 . Pp. 501. Price \$1.05. Boston: Ginn & Co.

This volume contains—besides the *Confessions*, several of the *Suspiria*, and other popular pieces—the most important part of the *Autobiographic Sketches* and some of the most interesting *Literary Reminiscences*.

Old English Ballads. Edited by James P. Kinard. Size $4\frac{1}{2} \times 7$. Pp. 126. Price —. New York: Silver, Burdett & Co.

This is a very interesting addition to the attractively bound series of classics issued by this firm.

Advanced First Reader. By Ellen M. Cyr. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 104. Price 30 cents. Boston: Ginn & Co.

This is a supplementary reader, richly illustrated by more than a score of engravings printed on a tinted background. The subjects of these engravings have some interesting connection with child-life, and have been judiciously selected.

Third Reader Graded Classics. By M. W. Haliburton and F. T. Norvell. Size $5\frac{1}{2} \times 7$. Pp. 224. Price 40 cents. Richmond: B. F. Johnson Publishing Company.

This is an attractive book, and the selections are fairly well chosen. The inclusion of biblical stories is wise, and the exclusion of some of the fanciful stories would do no harm.

Graded Primer. By Benj. N. Black. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 72. Price 20 cents. Syracuse: C. W. Bardeen.

Hans Andersen's Best Stories. Edited and adapted for pupils of third reader grade. Size 5×7 . Pp. 123. Price $12\frac{1}{2}$ cents. New York: University Publishing Company.

The Taylor School Readers, Second Reader. By Frances Lilian Taylor. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 159. Price —. Chicago: Werner School Book Company.

The standard of the first book has been maintained in the second. It was a pretty conceit to have the happy looking little girl upon the title-page.

Step by Step; a Primer. By S. C. Peabody. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 98. Price 30 cents. Boston: Ginn & Co.

This is an interesting, well illustrated book for the little children. The author defines her aim to be "to make little children natural, intelligent, and fluent readers." The three-color illustrations are particularly well done.

A Dramatization of Longfellow's Song of Hiawatha. By Florence Holbrook. Size $4\frac{1}{2} \times 6\frac{1}{2}$. Pp. 55. Price 15 cents. Boston: Houghton, Mifflin & Co.

Primary Songs for Rote Singing. Size 6×8 . Pp. 43. Price —. Boston: Ginn & Co.

Trees in Prose and Poetry. Compiled by Gertrude L. Stone and M. Grace Fickett. Size $5\frac{1}{2} \times 7$. Pages 184. Price 50 cents. Boston: Ginn & Co.

The study of trees is rapidly becoming a very popular branch of nature study. The astonishing thing is that it has been so long neglected. This is an especially interesting book, and may be used with success as a supplementary reader, for it is *literature*, not merely *information*.

Nature-Study Readers, Vol. V. Harold's Discussions. By John W. Troeger and Edna Beatrice Troeger. Size 5×7 . Pp. 298. Price 60 cents. New York: D. Appleton & Co.

The fifth volume of this series maintains the interest called forth by the preceding volumes, and is a book for the home just as much as for the school. The reading of it *with* the children will educate the parent.

The Adventures of Marco Polo. Edited by Edward Atherton. Size 5×7 . Pp. 163. Price 65 cents. New York: D. Appleton & Co.

This standard of the series is being kept high, and the broadening influence of this kind of supplementary reading in our schools can hardly be estimated.

Toward the Rising Sun. Youth's Companion Series. Size 5×7 . Pp. 138. Price —. Boston: Ginn & Co.

These descriptions are of places and peoples in which we are specially interested at this stage of our national development. The style is good and the information accurate.

Ancient History to the Death of Charlemagne. By Willis Mason West, University of Minnesota. Size $5 \times 7\frac{1}{2}$. Pp. 564. Price \$1.50. Boston: Allyn and Bacon.

This is intended for first year work in a high school. It is reviewed elsewhere in this issue in connection with other works on ancient history.

The Middle Ages. By Philip Van Ness Myers. Size 5×7 . Pp. 454. Price \$1.10. Boston: Ginn & Co.

This is a revision of the first half of the author's *Medieval and Modern History*. To each chapter is appended a brief bibliography of the most important of the original sources and secondary works available in English.

Studies in United States History. By Sara M. Riggs. Size $5 \times 7\frac{1}{2}$. Pp. xiii+173. Price 60 cents. Boston: Ginn & Co.

This is a topical history which aims to combine the "library" and "source" methods. The references are many and definite, the arrangement is well devised and it ought to be a helpful book.

English History Told by English Poets. By Katharine Lee Bates and Katharine Coman. Size $5 \times 7\frac{1}{2}$. Pp. 452. Price 80 cents. New York: The Macmillan Company.

If it is true that the life of the English people is depicted more truly in their poetry than in their philosophy this book ought to have the result desired by its author. It is a valuable addition to our supplementary reading.

A Teacher's Manual of Geography. By Charles McMurry. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 107. Price 40 cents. New York: The Macmillan Company.

This is full of practical suggestions whereby the teacher may be assisted in her efforts to make the study of geography interesting and effective. A good working bibliography is added.

Graded Arithmetics. By William E. Chancellor. Book 1, grade 2, etc., to Book 6, grade 7. Size $5 \times 7\frac{1}{2}$. Price —. New York: Globe School Book Company.

The author says that the plan of these books is neither topical nor spiral, but suggests that it is concentric and that he wishes to conform numbers in their facts and principles to the usual processes and powers and interests of children's minds.

A College Algebra. By G. A. Wentworth. Revised Edition. Size $5 \times 7\frac{1}{2}$. Pp. 530. Price \$1.50. Boston: Ginn & Co.

This work is intended for colleges and scientific schools. The first part is a review of the principles of Algebra preceding Quadratic Equations. Then follows a discussion of Quadratics, the Binomial Theorem, Choice, Chance, Series, Determinants and the general properties of Equations.

Elements of the Theory of the Newtonian Potential Function. By B. O. Peirce. Size $5\frac{1}{2} \times 8$. Pp. 490. Price \$2.56. Boston: Ginn & Co.

This is the third revised and enlarged edition and will be reviewed at length.

The Teaching of Chemistry and Physics in the Secondary Schools. By Alexander Smith, University of Chicago, and Edwin H. Hall, Harvard University. Size $5\frac{1}{2} \times 8$. Pp. 377. Price \$1.50. New York: Longmans, Green & Co.

Will have a comprehensive review shortly.

Elements of Physics. By Fernando Sanford, Leland Stanford Jr. University. Size $5 \times 7\frac{1}{2}$. Pp. 426. Price \$1.20. New York: Henry Holt & Co.

The author in a preface of distinctly educational value states his belief as to the place of physics and the most rational method of teaching it. He says that this book has been prepared specially for the teacher who has had an adequate training in the physical laboratory, and "it is not likely to succeed with any other teacher." We hope to test the author's position in a review of this interesting book.

Physics—A Text-Book for Secondary Schools. By Frederick Slate. University of California. Size $5 \times 7\frac{1}{2}$. Pp. 414. Price \$1.10. New York: The Macmillan Company.

The author states his position thus: "Instead of feeding students with crumbs from the specialist's table, Physics for the school must be treated in relation to the average boy and girl approaching the threshold of active life."

Introduction to Physical Science. By Alfred Payson Gage. Size 5×7 . Pp. 359. Price \$1.10. Boston: Ginn & Co.

The author says that his aim is to place before the pupil in simple language and in logical order, with due regard to child physiology, the general principles and the important laws of physical science and not to allow them to be obscured by a multiplicity of experimental details which would be more appropriate in a teacher's handbook or in a laboratory manual.

Physiology by the Laboratory Method, for Secondary Schools. By William J. Brinckley, Austin College. Size 6×8 . Pp. 536. Price —. Chicago: Ainsworth & Co.

Reserved for review.

A Laboratory Guide for Beginners in Zoölogy. By Clarence Moores Weed and Ralph Wallace Crossman. Size $5 \times 7\frac{1}{2}$. Pp. 105. Price 60 cents. Boston: D. C. Heath & Co.

The aim of the authors is to furnish a guide that will be suggestive and stimulating, not merely instructive and prescribing. This book is the result of ten years' class work, and is practically the result of a carefully conducted experiment in the teaching of zoölogy.

Thiers' La Campagne de Waterloo. Edited by O. B. Super, Dickinson College. Size 5×7 . Pp. 102. Price 40 cents. New York: Silver, Burdett & Co.

This is intended for college work and ought to be eminently suitable both from an historical and a literary point of view.

Corneille's *Le Menteur*. Edited by J. B. Segall, College of the City of New York. Size 5×7. Pp. 144. Price —. New York: Silver, Burdett & Co.

Beaumarchais' *Le Barkier de Séville*. By Antoine Muzzarelli. Size 4½×6¾. Pp. 176. Price 35 cents. New York: D. Appleton & Co.

German Composition. By E. C. Wesselhoeft. Size 5×7. Pp. 77. Price —. Boston: D. C. Heath & Co.

The simple style of everyday speech has been preserved throughout the selections and there are but few words of unusual occurrence. With such an aim as this many of the victims of some of our books on German composition will be in hearty sympathy.

Das edle Blut, Erzählung. Von Ernst von Wildenbruch. Size 5×7. Pp. 86. Price —. Chicago: American Book Company.

Lessing's *Minna von Barnhelm*. By Charles Bundy Wilson. Size 4½×6½. Pp. 196. Price 50 cents. New York: D. Appleton & Co.

This series might be called a "handy volume series;" the size, binding, topography, and illustrations are all that could be desired. A comprehensive introduction and a descriptive bibliography precede the text. The notes are not grouped, but are appended to each page.

A First Spanish Book and Reader. By William F. Giese, University of Wisconsin. Size 5½×7½. Pp. 357. Price \$1.20. New York: D. Appleton & Co.

The interesting review of books dealing with the Spanish literature which appears in this issue will be followed by others. This important contribution will receive notice at that time.

Spanish and English Conversation. First Book. By Aida Edmonds Pinney. Size 5×7. Pp. 111. Price 65 cents. Boston: Ginn & Co.

Spanish and English Conversation. Second Book. By Aida Edmonds Pinney. Size 5×7. Pp. 107. Price 65 cents. Boston: Ginn & Co.

Goldoni's *Il Vero Amico*. By J. Geddes, Jr., and Freeman M. Josselyn, Jr., Boston University. Size 4½×6½. Pp. 118. Price 40 cents. Boston: D. C. Heath & Co.

Practical Exercises on the Latin Verb. By Katherine Campbell Reiley. Size 8½×11 (cloth). Pp. 80. Price 50 cents, New York: American Book Company.

The First Year of Latin. By Walter B. Gunnison and Walter S. Harley. Size 5×7½. Pp. 319. Price \$1.00. Chicago: Silver, Burdett & Co.

The First Year in Latin is now enjoying special attention among bookmakers. The merits of some of the books will soon be the subject of a review. As is apparent from the names of the authors, this book is by practical teachers and is the result of their experience in the class-room. It is based on Cæsar's war with the Helvetii.

Cæsar's Gallic War, I-VII. Notes and Vocabulary. By J. H. Westcott, Princeton University. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 586. Price \$1.25. New York: D. Appleton & Co.

Our old friend Cæsar comes to us in the Twentieth Century series. We shall hope to comment in a review upon the style and fit of his new dress.

A School Grammar of Attic Greek. By Thomas Dwight Goodell. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 334. Price \$1.50. New York: D. Appleton & Co.

Reserved for review.

The Essentials of Business Law. By Francis M. Burdick, Columbia University Law School. Size $5\frac{1}{2} \times 7\frac{1}{2}$. Pp. 285. Price \$1.25. New York: D. Appleton & Co.

The author hopes by this book to disclose to girls and boys in our secondary schools the meaning of many legal terms which are constantly thrust before them in conversation and in newspapers; to show them how to make, indorse and use checks and other forms of negotiable paper; to teach them their rights as against hotel-keepers, common carriers and many others, as well as give them much useful information about the purchase and sale, the transfer and conveyance of land and personal property.

Shades and Shadows and Prospective. By O. E. Randall. Size $6 \times 7\frac{1}{2}$. Pp. 64. Price \$1.50. Boston: Ginn & Co.

This book is based on the principles of descriptive geometry, and its aim is to present those principles which are fundamental in the solution of both theoretical and practical problems, and by a formulation of these principles to arrive at and thus place on a mathematical basis those rules and formulas which are commonly used in practice.

Talks to Students on the Art of Study. By Frank Cramer. Size $5 \times 7\frac{1}{2}$. Pp. 309. Price —. San Francisco: The Hoffman-Edwards Company.

The author disarms any harsh criticism by his modest preface. He states his purpose to be to furnish effective suggestion to the youth who is passing through the critical period of intellectual life. The book seems to live up to its ideal and should be useful.

Development of the Child in Later Infancy. By Gabriel Compayré. Translated by Mary E. Wilson. Size 5×7 . Pp. 300. Price \$1.20. New York: D. Appleton & Co.

This is Part II of the Intellectual and Moral Development of the Child.

The Introductory Standard Dictionary. Abridged by James C. Fernald. Size $5 \times 6\frac{1}{2}$. Pp. 480. Price 60 cents. New York: Funk & Wagnalls Co.

NOTES

NATIONAL EDUCATIONAL ASSOCIATION

The Executive Committee announces with pleasure the unanimous selection of Minneapolis, Minn., as the place of meeting for the Forty-first Annual Convention of the National Educational Association, July 7-11, 1902.

The active members in all states are urged to cooperate with their respective state directors in securing a large attendance at the Minneapolis convention. It is gratifying to note that more than 1,200 active members were in attendance at the Detroit convention. It is believed that a still larger number will be present at the Minneapolis meeting. The new active members enrolled during the past year number 628, bringing the total active membership up to 2,810. The entire enrollment credited to the Detroit meeting is 10,180.

The Department of Superintendence will hold its next annual meeting in Chicago, Ill., February 25, 26, and 27, 1902.

The Central, Western, Trunk Line, and Southeastern Passenger associations have already granted the usual round-trip rate of one and one third fare, on the certificate plan, from all points in their respective territories. The New England, Southwestern, and Transcontinental associations will without doubt concur in the same rate and arrangement.

The Auditorium Hotel has been selected as the headquarters of the department; all rooms and meals will be on the European plan.

The meetings of the department will be held in University Hall in the Fine Arts Building, which is entered from the parlors of the Auditorium Hotel. Commodious rooms have been secured for the Round Table sessions.

The following is a preliminary program of the meeting: A complete program will be issued soon, and may be obtained upon application to this office, or to Hon. G. R. Glenn, President of the Department of Superintendence, Atlanta, Ga.:

Heath's English Classics

Aim to furnish those volumes which are required in preparation for college entrance examinations in English, in neat and attractive, yet inexpensive editions, carefully edited and printed.

OFFICIAL LIST FOR 1901-1905

Shakespeare's Macbeth	Arden Edition	25 cents
Burke's Conciliation with America	Edited by A. J. George	20 "
Macaulay's Milton and Addison	" A. P. Walker	40 "
Milton's Minor Poems	" A. P. Walker	25 "
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Addison's De Coverley Papers	" W. H. Hudson	35 "
Goldsmith's Vicar of Wakefield	" W. H. Hudson	50 "
Coleridge's Ancient Mariner	" A. J. George	20 "
Cooper's Last of the Mohicans	" J. G. Wight	50 "
Scott's Ivanhoe	" P. L. MacClintock	50 "
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George Eliot's Silas Marner	" G. A. Wauchope	35 "
Shakespeare's Merchant of Venice	Arden Edition	25 "
Shakespeare's Julius Cæsar	" "	25 "
Carlyle's Essay on Burns	Edited by A. J. George	25 "

The special features of Heath's English Classics are: (1) The texts are authentic, accurate, and practically complete; (2) the introductions give the historical setting and help the reader to feel the genius of the author and to catch the spirit of his age; (3) the notes are interpretive rather than philological and furnish admirable material for intelligent and appreciative study of the several texts.

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PRELIMINARY PROGRAM

TUESDAY, FEBRUARY 25

9:30 A. M.

1. "The County Institute from a Practical Standpoint"—Paper by Samuel Hamilton, superintendent of schools, Allegheny county, Pittsburg, Pa.
Discussion opened by Orville T. Bright, superintendent of schools, Cook county, Chicago, Ill.; W. K. Fowler, state superintendent of public instruction, Lincoln, Neb.
General discussion. (Limited to five-minute speeches.)
2. "What is the Real Value of Examinations as Determining the Teacher's Fitness for Work?"—Paper by B. G. Cooley, superintendent of schools, Chicago, Ill.
Discussion opened by Edward L. Stevens, superintendent of schools, Borough of Queens, New York City, Flushing, N. Y.; W. W. Stetson, state superintendent of schools, Augusta, Me.
General discussion.

2:00 P. M.

1. The Practical Application of All Learning to Better Living"—Paper by D. L. Kiehle, professor of pedagogy, University of Minnesota, Minneapolis, Minn.
Discussion opened by Professor George E. Vincent, University of Chicago, Chicago, Ill.; N. C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.
General discussion.
2. "Tenure of Office of Teachers and Superintendents"—Paper by Henry P. Emerson, superintendent of schools, Buffalo, N. Y.
Discussion opened by William E. Hatch, superintendent of schools, New Bedford, Mass.; H. O. R. Siefert, superintendent of schools, Milwaukee, Wis.
General discussion.

8:15 P. M.

Address—(subject and speaker to be announced.)

WEDNESDAY, FEBRUARY 26

9:30 A. M.

1. "The Ideal Normal School"—Paper by Professor W. H. Payne, University of Michigan, Ann Arbor, Mich.

RECENT PUBLICATIONS

Outline Maps for an Historical Atlas of the United States Illustrating Territorial Growth and Development

By FRANK HEYWOOD HODDER, Professor of American History in the University of Kansas. For introduction, 40 cents.

This book contains twenty-four outline maps of the United States, with directions for their use. The maps give all the lines that have at any time been territorial boundaries, including those that are obsolete as well as those still existing.

A History and Description of Roman Political Institutions

By FRANK FROST ABBOTT, Professor of Latin in the University of Chicago.
For introduction, \$1.50.

The first part traces historically the development of the Roman constitution from the earliest times to the reign of Diocletian. In the second part the consulship, the tribunate, the senate, the *comitia*, and the other institutions of the government are taken up, and a systematic detailed description is given of each.

"GLÜCK AUF"—A New German Reader for Beginners

By MARGARETHE MÜLLER AND CARLA WENCKEBACH, Professors of German in Wellesley College. For introduction, 75 cents.

The Teaching of English Grammar. History and Method

By F. A. BARBOUR, Professor of English in the Michigan State Normal College. 30 cents.

This book brings within the scope of four lectures (1) an account of the method pursued in teaching English grammar from the earliest publications upon the subject to the present time, (2) a brief outline of the History of the English Language, and (3) a brief statement of the principles of pedagogy which underlie the best teaching of English grammar.

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Discussion opened by Frank H. Jones, state superintendent of public instruction, Indianapolis, Ind.; R. G. Boone, superintendent of schools, Cincinnati, O.

General discussion.

2. "The Danger of Using Biological Analogies in Reasoning on Educational Subjects"—Paper by Dr. W. T. Harris, U. S. Commissioner of Education, Washington, D. C.

Discussion opened by — (Leaders to be supplied.)

General discussion.

2:00 P. M.

1. Round-Table of Minor Problems of City Superintendence.
Leader—James M. Greenwood, superintendent of schools, Kansas City, Mo.
2. Round-Table of Normal Schools.
Leader—John W. Cook, President of Northern Illinois State Normal School, De Kalb, Ill.
3. Round-Table of Rural School Problems, for State and County Superintendents.
Leader—Henry Sabin, Des Moines, Ia.
(Each leader will select speakers.)
4. Round-Table of Training Teachers (subject and leader to be supplied).

8:15 P. M.

Address—(Subject and speaker to be announced.)

THURSDAY, FEBRUARY 27

9:30 A. M.

1. The Sociological Aspect of the School—involving the training of children having unfortunate environment, the treatment of truant pupils and defective and dependent children"—Paper by Francis W. Parker, director of the School of Education, University of Chicago, Chicago, Ill.
Discussion opened by W. H. Elson, superintendent of schools, Grand Rapids, Mich.
General discussion.
2. "The High School as the People's College *versus* Fitting Schools"—Paper by Dr. G. Stanley Hall, president of Clark University, Worcester, Mass.

The Silver Series Text-Books of Modern Languages

DOUAY'S **ELEMENTARY FRENCH** READER

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READER

SCHILLER'S **DIE BRAUT VON MESSINA**, CARRUTH

HEYSE'S **UNTER BRÜDERN**, KEPLER

MANZONI'S **I PROMESSI SPOSI**, LEVI

LOISEAUX'S **ELEMENTARY SPANISH**
GRAMMAR

LOISEAUX'S **ELEMENTARY SPANISH**
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Louisiana State Normal School, Natchitoches
Territorial Normal School, Edmond, Okla.
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Discussion opened by Irwen Leviston, superintendent of schools, St. Paul, Minn.
General discussion.

2:00 P. M.

1. "College Graduates in Elementary Schools" — Paper by Thomas Balliet, superintendent of schools, Springfield, Mass.
Discussion opened by A. B. Poland, superintendent of schools, Newark, N. J.; Thomas B. Hutton, superintendent of schools, Odebolt, Ia.
General discussion.
2. "Psychology of Fun" — Paper by W. B. Hill, chancellor of the University of Georgia.
Discussion opened by — (Leader to be supplied.)
General discussion.
3. Educational Needs of a Democracy" — Paper by Charles D. McIver, president of State Normal and Industrial College, Greensboro, N. C.
Discussion opened by A. B. Warner, superintendent of schools, Missouri Valley, Ia.; Lewis D. Bonebrake, state commissioner of schools, Columbus, O.
General discussion.
Papers will be limited to twenty-five (25) minutes.
Formal discussion of papers by speakers named on the program will be limited to ten (10) minutes for each speaker.

Informal discussion will be limited to five (5) minutes for each speaker.

The Society for the Scientific Study of Teaching (the recognized National Herbart Society) will hold one session for the discussion of a paper on "American History in the Schools," by Miss Lucy M. Salmon, of Vassar College, New York.

On account of the limited capacity of University Hall, attendance on the various sessions of the department will necessarily be confined to active and associate members of the National Educational Association.

Membership badges, admitting to all sessions, may be obtained of the secretary in the main parlor of the Auditorium Hotel. Former active members will have no dues to pay at this meeting; associate members will pay a fee of \$2.00 for the year 1902.

All who are eligible are invited to become active members of the association.

A New American Literature

By ALPHONSO G. NEWCOMER
The Leland Stanford Jr. University

1. The book itself is a contribution to American literature. Its study, therefore, cultivates an appreciation of and a love for pure literature.
2. Its judgments are sound and independent. The author has not gone to current criticism for his opinions, but has reached his conclusions and stated them in an attractive and forceful style.
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A CLASSICAL CONFERENCE will be held at Ann Arbor, Michigan, on Thursday and Friday, March 27 and 28, in connection with the spring meeting of the Michigan Schoolmasters' Club. The Colleges and Schools of Michigan will be well represented on the program; and among the speakers from outside the state will be Professor Samuel Ball Platner, of Adelbert College, Cleveland; Professor J. C. Jones, of the University of Missouri; Professor Walter Hennison, of Oberlin College; Professor Wallace S. Elden, of the University of Ohio; and Mr. J. R. Nelson, of the Lewis Institute, Chicago. An invitation to be present and participate in the conference is extended to teachers of Greek and Latin and others interested in classical study.

PRESIDENT HYDE's remarks on the High School in his recent *Forum* article will be of interest to our readers. The following bears directly upon a question discussed in the January SCHOOL REVIEW, and is in marked agreement with the views there expressed:

The right sort of organization is the problem calling most loudly for solution in the high school. This organization for the three great ends already suggested demands that classical, commercial, and industrial high schools shall not be separated. The slight gain for each institution is purchased at cost of the premature separation of different classes of pupils before their tastes have been discovered and the range of their powers tested.

The best arrangement, in the writer's belief, is a single course of which a certain number of subjects, like English and algebra, are required; while others are open to choice under limitations, and still others to unrestricted choice.

Colton's Physiologies

PHYSIOLOGY: Experimental and Descriptive

By BUEL P. COLTON, A.M.

Professor of Natural Science, State Normal University, Illinois

A practical guide to the laboratory study of physiology for high schools, normal schools, and colleges. The book combines modern methods, scientific accuracy, and adaptation to the class room in a manner never before attempted. More than one hundred illustrations; twenty in colors.

Cloth. 443 pages. Price, \$1.12

PHYSIOLOGY: Briefer Course

For use in schools where a laboratory course cannot be undertaken. Special attention has been paid to clearness and brevity of statement, and to making the book perfectly adapted to the capacity of high-school pupils. Except in quantity of experimental work, the *Briefer Course* contains the same general features that contributed so much to the success of the larger work, which was the only one to break away from the old time methods.

Cloth. 399 pages. Illustrated. Price, 90 cents.

A. W. ABRAMS, Supt. of Schools, Iliou, N. Y., says:

"The book satisfies us better than any other we ever have had. It has the right matter in the right form for the average scholar."

PROF. B. G. WILDER, Cornell, University, says:

"Fulfills my ideal of what a High-School Text-Book on Physiology should be more nearly than any other work known to me."

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PROGRESS IN PORTO RICO.—Speaking of education in Porto Rico, Professor M. C. Brumbaugh, United States Commissioner of Education for that island, says:

No one could foresee the tremendous task that was awaiting us—945,000 human beings in Porto Rico, and 88 per cent. illiterate! The school organized by the military bureau of education had enrolled about 23,000 pupils, and \$330,000 was expended in the fiscal year 1899-1900 for these pupils. In the next school year, at an expense of \$400,000, 38,000 children attended the schools, and this year, with a budget of \$501,000, we have 992 schools and 50,000 pupils enrolled. This represents in part the growth of the school idea in Porto Rico. Last year we had an average attendance of 78 per cent. being, with Massachusetts excepted, the largest average of any country under our flag.

The political parties in the respective municipalities one year ago refused minority representation on the school board and forbade the election of teachers holding political opinions at variance with their own. Today we have complete minority representation and the teachers are chosen solely upon their merit.

In all schools the children sing our national songs in English and read from English books. Spain in four hundred years never erected a single schoolhouse in Porto Rico. We have expended \$200,000 in the erection of twenty-one agricultural and thirteen graded school buildings. All pupils in all schools are furnished books and supplies absolutely free. The most patriotic scholars under the flag today are our fifty thousand boys and girls in Porto Rico. We have a first-class normal school in operation, with an enrollment of almost two hundred pupils. A large and beautiful building for this normal school, at a cost of \$40,000, is now nearing completion at Rio Piedras. High schools, as good as any in the cities of equal size here, are organized in every city in which pupils are ready to pursue the course.

SUPERINTENDENT GAY, of Malden, Mass., defines an interesting problem in a recent interesting article on the "High School" (*World Review*, January 5) in pointing out that the "Business College" is the only institution that competes successfully with the modern high school in its own field. He says:

Text-Books in Business and Economics

Business Law. By THOMAS RAEBURN WHITE, B.L., LL.B., Lecturer on Law in the University of Pennsylvania. With an introduction by Roland P. Falkner, Ph.D., Associate Professor of Statistics, University of Pennsylvania. 367 pp. \$1.25.

The object of this book is to present the elementary principles of law relating to the more common business transactions in a style so clear and free from technicality that they can be readily understood by persons unused to legal phraseology.

"I think it an admirable little work, well suited for both high-school and college classes. It is sufficiently comprehensive, and the subjects treated are explained concisely and clearly."—J. E. LeRossignol, Ph.D., Department of History and Economics, University of Denver.

Introduction to the Study of Commerce. By FREDERICK R. CLOW, Ph.D., State Normal School, Oshkosh, Wis. With an introduction by F. W. Taussig, Ph.D., LL.B., Professor of Political Economy, Harvard University. Illustrated by charts and diagrams. 250 pp. \$1.25.

The governing purpose running through the work is not only to prepare the student for practical business, but to enable him to comprehend some of the principles which lie at the bottom of all business.

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Institutes of Economics. By E. BENJAMIN ANDREWS, D.D., LL.D., Chancellor of the University of Nebraska, late President of Brown University. New and revised edition. 240 pp. \$1.10.

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Our business courses are not, as a rule, satisfactory. Here, again, we are met by a condition and not a theory. The commercial school is almost the only kind of private school that has prospered in Massachusetts, at any rate during the past twenty years. These schools exist because there is a demand that the studies of the grammar schools, penmanship, spelling, correspondence, and computation, shall be carried further than they are now carried. This gives us the clew which we are to follow. Pupils learn in the grammar schools to write slowly and laboriously, let those who wish learn in the high school to write freely and rapidly with the pen and with the typewriter; they learn to spell, let them go on learning new words that must be used in business life; they learn to express their thoughts in writing, let them go on to a higher degree of perfection; they learn to compute, let them learn accuracy and rapidity by long and severe practice.

THE UNIVERSITY OF CHICAGO PRESS announces the appearance of *Russian Political Institutions*, by Professor Maxime Kovalevsky, formerly professor of public law at the University of Moscow. The book, which is based upon a series of lectures delivered at the University of Chicago last summer, traces the political development of Russia from the earliest periods to the present time, giving special attention to the judicial and military systems and the subject of personal liberties. It sells for \$1.50 net. The University of Chicago Press also announces the appearance of the first three numbers of the series, "Contributions to Education," those now ready being entitled, *Isolation in the School*, by Professor Ella Flagg Young (50 cents net); *Psychology and Social Practice*, by Professor John Dewey (25 cents, net), and *The Educational Situation*, by Professor John Dewey (50 cents, net). The series as a whole aims to effect the union of educational theory and practice in distinction from vague enthusiasm, loose exhortation, and abstract theorizing.

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It endeavors to bring the discussion of actual school practice to the test of the fundamental principles involved. These principles are derived from modern psychology, and are stated in a simple and non-technical manner. The series will bring its readers into touch with what is vital in contemporary educational philosophy.

DR. GUY MONTROSE WHIPPLE has been appointed Lecturer in the educational department of Cornell University. This appointment has been made to meet the increasingly evident need of an expert application of modern psychological theory to the problems of education. Dr. Whipple graduated from Brown University in 1897, was assistant and scholar in psychology at Clark University during 1897-8, and has since been connected with the psychological department of Cornell University, where he received a doctor's degree in 1900, being elected a member of the society of Sigma Xi the same year. He has published numerous contributions to experimental psychology.

The experiment of a summer session under the direct management of the university authorities has proved a decided success at Cornell. In the first place the growing attendance for three years has shown that there is a real demand among teachers for genuine summer work of university grade. In the second place the ablest professors have shown an increasing willingness to forego a part of their vacation to do this work. The same tendencies are seen at other universities, as at Columbia, Chicago, and California. According to the Cornell announcement for 1902, some fifty instructors offer over ninety courses, which cover a wide range of subjects. A number of professors have been called from other universities. Among them we note the names of Professors Brigham, of Colgate; Howard, late of Leland Stanford Jr.; Hale, of Union; and Von Klenze, of Chicago.

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THE University of Chicago Press announces for immediate publication the first of the Decennial Publications of the University, which have been planned in connection with the celebration of the completion of the first ten years of the corporate existence of the institution. In general, the series will set forth and exemplify the material and intellectual growth of the University during its first decade, and will consist of ten volumes, which are now in an advanced stage of preparation. The first two volumes will contain the President's Report to the Board of Trustees on matters of administration. The last eight volumes will consist of separate articles by representative members of the faculty, containing the results of original research in many fields. The lines of study represented in general will be Philosophy and Education, the Political and Social Sciences, History, the Languages and Literatures of the Old and New Testaments, Theology and Church History, the Classical Languages and Archæology, Sanskrit and Comparative Philology, the Romance and Germanic Languages, English, Mathematics, Astronomy and Astrophysics, and the Physical and Biological Sciences. The various articles of the volumes will be issued and circulated in separate form, and will constitute valuable contributions to science. The volumes will be issued in quarto form, $8\frac{3}{8} \times 11\frac{1}{8}$ inches. The first of the investigations, which has just appeared, is a monograph by Albert A. Michelson, professor and head of the Department of Physics, entitled *The Velocity of Light*. Professor Michelson's researches on this subject while at the United States Naval Academy attracted wide attention among physicists. Following the line of his entire experiments he now describes a new method by which the velocity

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of light, one of the fundamental constants of motion, the accurate determination of which is of the utmost importance in physical and astronomical research, may be measured with a very narrow margin of error. For publication during the next ninety days announcement is made of several more extensive contributions in book form. Among these may be mentioned Wager's *The Life and Repentance of Marie Magdalene*, an old English morality play, edited with an introduction and notes by Frederic Ives Carpenter, of the Department of English; *On the Text of Chaucer's Parliament of Foules*, by Dr. Eleanor Hammond, of the Department of English, in which a new genealogy is established for the manuscripts of this poem; *Greek Papyri from the Cairo Museum*, together with other documents of Roman Egypt, by Dr. Edgar J. Goodspeed; and *Experiments in Artificial Parthenogenesis*, by Professor Jacques Loeb, a further account of a remarkable series of studies in the phenomena of life.

SCHOOL OF COMMERCE COURSE OF STUDY.—A seven-year course of study for the projected high school of commerce in Manhattan has, after prolonged discussion, been adopted by the board of superintendents and presented to the school board. It was prepared under the direction of Associate Superintendents Jameson, Meleney, Schauffler, McMullen, and Hunt, the latter a specialist along this line of educational work.

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THE University of Chicago Press announces for publication, in book form, during the spring, the series of lectures on Commerce and Administration, delivered during the past winter, under the direction of the College of Commerce and Administration of the University of Chicago. The lectures were delivered by representative business men, and cover a wide range of commercial activity, including the management and operation of railways, the steel industry, wholesaling and advertising.

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At a meeting of chemistry teachers held at the Hotel Albert, New York, March 20, the Chemistry Teachers' Club was organized. A constitution was adopted, and the following officers were elected: A. C. Hale, president; R. H. Fuller, vice-president; A. L. Arey, treasurer; M. D. Sohon (Peter Cooper High School), secretary.

NEW YORK ASSOCIATION OF BIOLOGY TEACHERS.—The first meeting for the current year of the New York Association of Biology Teachers was held at 43 Hancock street, Brooklyn, N. Y., on January 31, 1902. The following officers were elected for the year: President, Dr. H. R. Linville, DeWitt Clinton High School; vice-president, Dr. E. F. Byrnes, Girls' High School; secretary, George W. Hunter, Jr., DeWitt Clinton High School; treasurer, Miss M. F. Goddard, Peter Cooper High School. Two papers were read, entitled, "The Pedagogical and Ethical Content of Biology," by Miss E. F. Byrnes, and "The History of Zoölogy in the Secondary Schools of the United States," by Miss Marion R. Brown, of the Erasmus Hall High School. The purpose of the club is to discuss, and, if possible, to determine the best methods of teaching biology in the secondary schools. The club is now entering upon its third year.

In view of the publication in this number of the recent proceedings of the vigorous and wide-awake New England Association of Teachers of English, the following information will doubtless prove interesting to our readers: Its constitution was adopted February 23, 1901; its membership is open to teachers of English in New England schools or colleges, to principals, super-

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visors, superintendents, presidents, and deans; the annual fee is one dollar; meetings are held in November and March—the latter regularly in Boston; it has three standing committees—one on methods of teaching and study, one on courses of study, one on college entrance requirements. One of its interesting and novel lines of activity is the publication of leaflets. Among those already issued are: *A Word about Grammar*, by Arlo Bates; *Home Reading*, by Miss Alice Smith; *On Grievs and Discontents*, by Samuel Thurber; *Method and Aim of Written Work*, by A. J. George, and *Successful Combination against the Inert*, by the alert and efficient secretary, George H. Browne. We shall hope to publish extracts from some of these leaflets in later issues.

THE general sessions of the convention of the National Educational Association will be held in the Exposition Auditorium, where Benjamin Harrison was nominated a second time for the presidency. Exhibit space will be supplied in the same building. Much of this space has already been allotted to exhibitors; and it will practically all be taken by May 1. Places for the meetings of the various sections are all within a block of a trolley line. They have been selected as follows: Physical Education, Exposition Auditorium; Secondary Education, East High School; Child Study, East High School; Music, Andrew Presbyterian Church; Kindergarten, First Congregational Church; Elementary, First Congregational Church; Indian Education, Plymouth Church; Defectives, Plymouth Church; The National Council, Unitarian Church; Business Department, Minnesota School of Busi-

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MANY American teachers of Greek have known for some time of the new plan of Greek instruction in the German gymnasia proposed by the noted philologist Professor Ulrich von Wilamowitz-Moellendorff at a conference held in Berlin year before last, and published in *Verhandlungen über Fragen des höheren Unterrichtes*, 1900. This plan involved the preparation of a new Greek chrestomathy, of which Professor von Wilamowitz-Moellendorff, as the representative of a commission appointed by the minister of education, had the making. This book, which has been awaited with much interest, is at last published, under the title *Griechisches Lesebuch* (Berlin: Weidmann). With characteristic German regard for the weight which the schoolboy is to carry in his satchel, the book is divided into four volumes, two of text and two of notes. The selections are mainly prose; for the editor takes it for granted that the student has already read the poetry of Homer and the tragedians. Familiarity with the New Testament and some of the works of Plato is also presupposed, while the writings of Herodotus are entirely omitted, for the reason that they should be read in large quantity and rapidly. The preface states that the book is designed for students who have learned

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enough Greek to be able to read a book for what there is in it. In the belief that one learns Greek only for the sake of reading it, and reads it only to understand a world period during which Greek was the dominant language of the spirit, the editor includes in his reader extracts from the works of every century from the sixth before Christ to the fourth of our era, without regard to the dialect or nationality of the author. An examination of the contents will show the wide range of the selections. They are grouped under ten headings: "Fables and Stories," "History," "Politics," "Geography and Astronomy," "Mathematics and Mechanics," "Medicine," "Philosophy," "Early Christian," "Æsthetics and Grammar," and "Documents and Letters"—which last is a collection of eighteen pieces of various dates. The variety in dialect and origin is apparent from a list of the authors excerpted—too long to reproduce here, but a formidable one for the ordinary teacher of Greek. The introductions, however, with which each extract is furnished, and the full notes, which aim to make good the deficiencies of the grammars and dictionaries in common use, will help him out of many difficulties. He will find the book useful for a survey of Greek literature and culture, and well adapted to the correlation of Greek to other branches of study. Whatever be the final decision as to its practical use with classes, either as a whole or in parts, it is of interest to Americans as a contribution to the classical question, and a worthy addition to the library of the teacher, both for its selection of texts and for the preface and concluding remarks of its gifted editor.—*Nation*, APRIL 10, 1902.

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DECLARATION OF PRINCIPLES.—The resolutions adopted by the National Educational Association were unusually vigorous in character. Here they are:

1. On account of the increased responsibilities placed on the bureau of education in the organization and administration of public school systems in the recently added territory of the United States, in successfully conducting an extensive system of Indian schools, and in aiding the various states and territories in securing good and efficient school system, we urge upon Congress the necessity for organizing the bureau upon broader lines, and clothing the commissioner with higher and more definite powers. We believe that the time has come for the recognition of the great importance of educational interests of the country in the conduct of state affairs by the organization of the department of education as an independent department, taking equal rank with other departments.

2. We reiterate the statement which has so often been made in the declaration of principles of this association, that the common schools of this country are for the education of all the children. They are the one great agency upon which the nation is to rely for a barrier against the setting up of "class distinctions which have no place on American soil." We believe that a conservative but efficient compulsory education law, with the proper regulation of child labor, is necessary to the complete realization of a good common-school system.

3. We heartily commend every step which may be taken for increasing the necessary qualifications of teachers, and hope soon to see as definite a standard for the training of teachers as is now fixed by the best schools in the country for the training of physicians or lawyers.

4. Again we would plead for unity of effort for the complete education of the child, constantly keeping in mind that the present division of the work of instruction into elementary, secondary, and higher, is for administrative purposes only.

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5. We believe that it is both just and possible to keep the country schools in the foregoing, and all, respects up to the highest standard of excellency and efficiency. We, therefore, congratulate those states which have been pioneers in demonstrating the possibilities of this mode of reorganization, and renew our endorsement and commendation of it as the best plan yet proposed in relief of the isolated one-room schools.

6. We commend to all local authorities the necessity of greater care in the arrangement of courses of study, that they may be adapted to the pupils to be instructed, rather than that pupils should be adapted to a fixed course of study and an inflexible system of grading. We hold that the individuality of the pupil should be carefully considered to the end that he may be instructed in the light of his limitations and capacity. And we urge greater thoroughness in instruction in the so-called elementary subjects, rather than an enrichment of courses already overtaxed, at the expense of thoroughness and satisfactory work.

7. We regard true education as inseparable from morality, and believe the public school the recognized agency to make this relation binding. We urge public school authorities of the country, teachers, and parents, to give strict attention to moral instruction in our schools as the true foundation of character and citizenship. Every consideration of good public policy and healthful social conditions point to the necessity of such instruction.

8. It is apparent that familiarity with the English Bible as a masterpiece of literature is rapidly decreasing among the pupils of our schools. This is the direct result of a conception which regards the Bible as a theological book merely, and thereby leads to its exclusion from the schools of some states as a subject of reading and study.

We hope and ask for such a change of public sentiment in this regard as will permit and encourage the English Bible, now honored by name in many schools, law,

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and state institutions, to be read and studied as a literary work of the highest and purest type side by side with the poetry and prose which it has inspired and in large part formed.

9. We commend the example of those boards of education whose settled policy is to employ teachers upon merit only without reference to political or other considerations.

10. While there has been great improvement in the construction of school buildings, and better lighting, heating, ventilation, and seating have been provided, yet there is great room for further improvement, and many questions with reference to the most important problems of school architecture, hygiene, and sanitation are still unanswered. We believe there should be a commission created by this body whose duty shall be to collect all the best information extant on the construction of school buildings and matters pertaining to school hygiene and sanitation, and publish it in a form which will be available for use by school authorities.

11. Recognizing the necessity of making many changes from year to year in our educational system in order to meet the demands of our social and industrial conditions, and to keep pace with the improvements in both methods and administration, we believe that the committees known as "the committee on secondary education," "the committee on elementary education," and "the committee on rural schools" should be recreated as standing committees, to perform such duties as were prescribed for them under the resolutions creating them.

12. We believe that a proper conception of what educational work can do for the community and state can be best inculcated by a thoroly wide-awake teaching profession; therefore we cordially indorse the organization of summer schools thruout the country for the instruction and training of teachers by the leading educators.

ANY civilization is as weak[as its weakest part, especially a democratic

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[*"Part I, The Middle Ages," ready in September. The complete book, ready January 1, 1903.*]

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civilization. So long as there are untrained masses in a democracy the whole fabric of society is weak, and it may at any turn of affairs be endangered. Many educational institutions as there are, it is yet true that vast masses of the people—millions and millions of them—have no opportunity to be trained. Especially is this true in rural communities, and more especially in the rural communities of the southern states. The children of these communities are yet neglected. They are the forgotten people. It is of comparatively little importance to society that a few thousand young men and women are receiving college education so long as millions, who are of as great natural capacity, are receiving no training at all. The best method of helping toward the building up of the people, then, is to help the development of the public school system in every community where it is not already adequately developed. The investment of hundreds of millions of dollars in better country school houses, in their equipment and in better teachers, so that the rural public school may become the most efficient instrument for training hand and mind that has ever been devised—this is the task that awaits statesmen and philanthropists. There is no other task that can for a moment be compared with it in importance.—MR. WALTER H. PAGE, in the *World's Work*.

BOSTON AND RETURN, \$19.00 VIA THE WABASH.—On account of the meeting of the Brotherhood of St. Andrew, the Wabash road will sell excursion tickets from Chicago to Boston, October 7 to 11, at one fare (\$19) for the round trip. By deposit and payment of 50 cents the limit may be extended to Nov. 12. Write for maps and time-tables. F. A. Palmer, A. G. P. A., 97 Adams St., Chicago, Ill.

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D. C. HEATH & Co., publishers, Boston, have in press for immediate issue Goldoni's *Il Vero Amico*, one of the most entertaining easy Italian comedies, arranged with notes and vocabulary by Professor Geddes and Professor Josselyn, of Boston University.

MESSRS. BENJ. H. SANBORN & Co. announce a new *Atlas of the Geography and History of the Ancient World*. This book is to have thirty-three maps, with a complete index, and, in mechanical execution, the firm makes the claim that it will be equal to their popular Kiepert. Designed for school and college use, it will be bound in paper and in cloth.

MESSRS. RAND, McNALLY & Co. have recently added to the agency force of their educational department, Mr. R. D. Williamson and Mr. H. W. Schroyer. Mr. Williamson is a graduate of the University of Michigan, and has had several years' experience as a teacher and as superintendent of schools. He will be hereafter the Michigan agent for Rand, McNally & Co. Mr. Schroyer has been for several years superintendent of schools in Henderson, Minn., and has made a distinct success in educational work. He will act as Minnesota agent.

MR. WILLIAM MORTON PAYNE is a literary critic who has done much work in a quiet way, and of a character that makes itself felt without ostentation or flourish. Two volumes of the scholarly essays which he contributes regularly to *The Dial*, have already been published, and he is about to bring out, through A. C. McClurg & Co., a third volume which will continue the discussion of contemporaneous literary and educational matters. Mr. Payne

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has the faculty of always being pertinent, and as his essays appear in a fortnightly journal, they form a record of the foremost topics in chronological order. The new volume is called *Various Views*, and will be uniform in style and binding with *Little Leaders* and *Editorial Echoes*, Mr. Payne's previous books of essays.

THE late Mr. John Fiske left two volumes of essays ready for publication. They will be published in the early autumn by the Macmillan Co. under the title *Essays: Historical and Literary*. They comprise the only posthumous work completed and made ready for the press by Mr. Fiske himself before his death. The contents of the volumes will be, Thomas Hutchinson, last Royal Governor of Massachusetts; Charles Lee, The Soldier of Fortune; Alexander Hamilton; Thomas Jefferson, The Conservative Reformer; James Madison, The Constructive Statesman; Andrew Jackson, Frontiersman and Soldier; Andrew Jackson, and American Democracy Sixty Years Ago; "Tippecanoe and Tyler Too;" Daniel Webster; Old and New Ways of Treating History; The Boston Tea Party; Evolution and the Present Age; John Milton; John Tyndall; Koschei the Deathless; The Story of a New England Town; Reminiscences of Huxley.

Mayor Low recently sent the following letter to President C. C. Burlingham of the board of education:

All through the most crowded sections of the city there are costly public buildings; many of them are provided with playgrounds or gymnasiums, which are closed for a part of every week and for a portion of every year, while all about them are

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children who have to play in the streets for the lack of playgrounds. Such buildings might also, perhaps, properly be used, under suitable regulations, as gathering places for the neighborhood clubs, guilds, debating societies, and the like.

President Burlingham has the following to say to the proposition to open school buildings after school hours and on holidays for recreation purposes:

It is with decided pleasure that I find that we have a city government and a mayor willing to support the theory that school buildings should be open for the advantage of the general public, and, incidentally, to sanction a number of projects which long have been under consideration by the board of education. The letter from Mayor Low, therefore, was most acceptable to me, because, in a way, it marked the beginning of almost a new era in the attitude of the city government toward the employment of school buildings. That it is practically a waste of city money to allow the costly school buildings to lie idle, shut as tight as a safe, except during school hours, has been recognized now for four years, and various beginnings in throwing open the buildings to popular advantage have been made. Up to this time, however, the board has been handicapped by lack of funds. Now that the mayor is willing to back us up financially in these projects, the way to important improvements will be comparatively simple.

In fact, such support seems to make possible a number of schemes which have passed various committees lately, and now await the action of the board. One of these is a resolution from the committee on lectures and libraries, which provides for free lectures to the people on Sundays. The committee on care of buildings has approved the use of Public School 33, Manhattan, by the Public Education Association, for the purpose of giving six free concerts on successive Sunday evenings.

Another committee has under consideration the opening to the public in the

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evening of all the roof playgrounds in the schoolhouses. In order to give the people an incentive to visit these places, we are discussing the advisability of furnishing some sort of concert, or else of giving a stereopticon exhibition, employing the lanterns and unusually fine slides owned by the lecture bureau. Furthermore, plans are now completed for an extension of the summer school and playground work in July, and the experiment of placing shower baths in Public School I will probably be extended to six other school buildings immediately, and to more when we get the money. The evening play centers operated on the East Side, where quarters for young people's clubs were furnished and instructors provided, are being encouraged, and doubtless they will be extended in proportion to demand and financial ability.

The experiment of utilizing school buildings out of hours began primarily with the free lecture. Later, the Association for the Improvement of the Condition of the Poor operated summer schools in city buildings. The city in 1898 took over these schools and made them public vacation institutions, extending the plan widely by opening playgrounds. Later the board sent instructors to the parks, the piers, open lots and swimming baths. The next step was the continuation of summer evening play centers for boys and girls in the East Side throughout the entire year, which led to the development of clubs and reading and literary circles. The next experiment, since dropped for lack of funds, was the opening of reading rooms at night. Later, trolley and barge excursions were provided for children in summer. The limit on all of these extensions of the new education has been only the financial one. An instance of this financial restriction has been the difficulty of utilizing properly the roof playgrounds. We have wanted to get the people up there in the cooler air on summer evenings, but the climb up the stairs has been too much for the class we wish particularly to reach—the mothers and babies. We need elevators, and in some schools a place has been left for just this purpose. It all hinges on money, however.

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THE Association of Colleges and Preparatory Schools of the Southern States will hold its eighth annual meeting at the University of Mississippi, on November 6-7. The program consists of an address by the president, Professor Edwin Mims, of Trinity College, North Carolina; report of committee on "Preparation of Girls for College," by Professor J. L. Armstrong, of Randolph, Macon Woman's College. "On What Condition Should the Southern Association Provide for the Admission to College of 'Special' Students?" by President George A. Denny, of Washington and Lee University, and Mr. C. B. Wallace, of University School, Nashville, Tenn.; report of the executive committee by Chancellor Kirkland, of Vanderbilt; "The Relations of the College and Professional Schools," by Professor E. H. Babbitt, of the University of the South; "The Status of History in the Colleges and Schools of the South," by Professor F. W. Moore, of Vanderbilt University; "Outlook of the Public High School in the South," by Professor P. P. Claxton, of the University of Tennessee, and Professor P. H. Saunders, of the University of Mississippi; "Athletic Control in School and College," by Professor W. L. Dudley, of Vanderbilt University; "Salaries of Professors in Southern Colleges," by Mr. B. H. Locke, of Oklahoma High School; "Educational Problems in the Southern States," by His Excellency, A. H. Longino, governor of Mississippi, Mr. D. E. Cloyd, inspector of schools for the General Education Board, and Professor George H. Locke, editor of the SCHOOL REVIEW.

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season of football, for example, lasts six weeks in the fall, and so far as class-room work is concerned, the time is practically thrown away. The members of the team attend lectures regularly; they are obliged to; but their minds are on signals and plays for the next game or practice. As a consequence one-fifth of the year is lost, and the players have to do as much work in the remaining four-fifths as others do in the five-fifths. With average students it will not be done. The physical training which the football men have gone through cannot under favorable circumstances increase their efficiency enough to make good the difference. Then, as a rule, their participation in athletics has made them natural leaders in the social life of the college, and so they lose still more time. The only point that may be regarded as established by the records is that few students admitted to the teams are subsequently thrown off for poor scholarship. This proves that most athletes can usually do enough work to remain satisfactory in their studies. Of late years a good player has lost caste if he permits himself to be disqualified through any fault of his own.—PROFESSOR IRA N. HOLLIS, in the *October Atlantic*.

A. C. McCLURG & Co., announce for early fall publication their new edition of *The Expedition of Lewis and Clarke*. Just how important this announcement is will be appreciated when it is understood that no handy popular edition of the classic has been available for years. There has been the most crying need for something of the kind, and Messrs. McClurg are entitled to a very substantial evidence of gratitude from the public in general. This edition has been prepared for the press by Dr. James K. Hosmer, author

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THERE will be many persons disappointed at the announcement that New Orleans cannot provide accommodation for the midwinter meeting of the N. E. A. commonly known as the superintendents' meeting. The executive committee has therefore changed the place of meeting to Cincinnati.

The midsummer meeting will be held in Boston July 6-10, inclusive. The further announcements in regard to local arrangements will soon be made.

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country. They are the sturdy farmers, who till the soil, produce the wealth and pay liberally their taxes to the state. I say that their sons and daughters are entitled to have better schools and longer school terms, that they may be better equipped to meet the responsibilities and fight the great battles of life; and if I am elected your governor I shall make a supreme effort to bring about this result, so much needed and so imperatively demanded. I want to live to see the day when every boy and girl in Tennessee, whether living in country or city, whether the child of poverty and toil, or the child of wealth and luxury, shall attend or have the opportunity of attending a well taught school, for at least nine months in every year. And when this is done you will see your penitentiary problem simplified, your criminal cost bills grow infinitely less, and the productive energy and wealth of this great state be many times multiplied.

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doubt about this. Its exact truth cannot be seriously questioned by any one informed on the subject. A young man taught a public school in one of the eastern counties of the state. He never saw the county superintendent until the closing day of the session, when that gentleman put in an appearance, shook hands with him, told him that the patrons of the school were pleased with him, and would be glad to have him return and bade him good-bye. In one of the most important counties of the state, a faithful and useful superintendent was superseded by a man of dubious character and life, who had a political pull and who was of no manner of use in the office to which he was appointed. In another county, a physician of political influence and large practice was appointed to this office, who in the nature of things was incapacitated by professional engagements from attending to its duties. These are specimen cases.

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